

Positions

Current

2024–Present **Junior Professor Chair in Statistics (tenure track)**, *Medecine faculty and Desbrest Institute of Epidemiology and Public Health (IDESP - UMR U1318 Inserm)*, University of Montpellier, France

Past academic positions

2021–2022 **Attachée Temporaire d'Enseignement et de Recherche (A.T.E.R.)**, *Applied Mathematics and Computer Science Departement, UFR 6, University of Montpellier Paul Valery*, Montpellier, France

2013–2018 **Research Assistant**, *Institute of Statistics, Biostatistics and Acturial Sciences (ISBA), Université catholique de Louvain et Research Center for Operations Research and Statistics (ORSTAT), Katholieke Universiteit Leuven*, Louvain-la-Neuve et Leuven, Belgium

2013–2016 **Teaching Assistant**, *Louvain School of Statistics, Biostatistics and Actual Sciences (LSBA), Université catholique de Louvain*, Louvain-la-Neuve, Belgium

2013–2016 **Statistical Consultant**, *Plateforme technologique de Support en Méthodologie et Calcul Statistique (SMCS), Université catholique de Louvain*, Louvain-la-Neuve, Belgium

Past positions (outside academia)

2022–2024 **Biostatistician**, *Clinical Research and Epidemiology Unit, Montpellier University Hospital*, Montpellier, France

2019–2021 **Biostatistician**, *Clinical Research Unit, Nestlé Research Center*, Lausanne, Switzerland

Education

2013–2018 **PhD in Sciences (Statistics)**, *Université catholique de Louvain and Katholieke Universiteit Leuven*, Belgium

Under the supervision of Profs. Ingrid Van Keilegom et Catherine Legrand, defended on november 9, 2018. Thesis title: “*Cure models in survival analysis: from modelling to prediction assessment of the cure fraction.*”

2011–2013 **Master's degree in Statistics : Biostatistics**, *Université catholique de Louvain*, Belgium

Master thesis title : “*On the introduction of cured observations in survival analysis : a literature review on cure models*”, uder the supervision of Profs. Catherine Legrand et Ingrid Van Keilegom.

2009– 2010 **University degree (D.U.) in Economics and Management**, *University of Auvergne*, Clermont-Ferrand, France

Exchange program with the University of Oklahoma (U.S.A) between August and December 2009. Courses followed : human geography, demography and statistics.

2006–2008 **Dual Master's degree in Developement Economics**, *University of Auvergne*, Clermont-Ferrand, France

2005–2008 **Magistère Development Economics**, *University of Auvergne*, Clermont-Ferrand, France

2003–2006 **Bachelor's degree in Economics**, *University of Montpellier (1st & 2nd years) and University of Auvergne (3rd year)*, Montpellier and Clermont-Ferrand, France

Publications

Peer-reviewed journals

- 13 Denis, H., Macioce, V. , Courtabessis, E. , Jover, C. , Bera, L. , Laglaoui Bakhiyi, C., Geissmann, N., Rahali, M. , Colombet, C., Brillet, L., Boquain, A., **Amico, M.** , Grima, L., Nagot, N., and Kerbage, H. (2026). Cognitive-behavioural therapy in hospital day-care unit for adolescents with severe anxious school refusal: a phase II multicentre study, *European Child and Adolescent Psychiatry*, Online
12. Silva, R., Riedel, C., **Amico, M.**, Reboul, R., Guibert, B., Sennaoui, C., Bessiere, C., Ruffle, F., Gilbert, G., Boureux, A. et Commes, T. (2025). Acute myeloid leukemia risk stratification in younger and older patients through transcriptomic machine learning models, *Scientific Report*, **15**, online.
11. Pers, Y-M. et al. (2025). Effect of intra-articular adipose-derived mesenchymal stromal cell versus placebo injection on pain and function in patients with knee osteoarthritis: the ADIPOA2 phase 2b randomised clinical trial, *Annals of Rheumatic Diseases*, to appear.
10. Canaud, B., Davenport, D., Morena-Carrere, M., **Amico, M.**, Molinari, N., and Cristol, J-P. (2025). Continuous beta-2 microglobulin-based clearance highlights superiority of high-Dose HDF over high-flux HD in predicting outcomes, *Scientific Report*, **15**, online.
9. Desmyttere, G., Ralandison, S., Dusfour, G., Moulis, L., **Amico, M.**, Julia, M., Pers, Y-M., and Jorgensen, C. (2025). A combined analysis of spinal mobility and gait spatiotemporal parameters in axial spondyloarthritis using wearable sensors, *Clinical Biomechanics*, **126**, online.
8. Savvala, N., **Amico, M.**, Joumaa, S., Jaussent, A. Silvestri, M., Lefebvre, P. Khamajeet, A., Picot M-C., Galtier, F., and Nocca, D.(2024). Nissen sleeve gastrectomy: 5-year follow-up results, *Surgery for Obesity and Related Diseases*, **21**: 3, 311–318.
7. Saour, M., Blin, C., Zeroual, N., Mourad, M., **Amico, M.**, Gaudard, P., Picot, M-C., and Colson, P. (2024). Impact of a bundle of care (intravenous iron, erythropoietin and transfusion metabolic adjustment) on post-operative transfusion incidence in cardiac surgery: a single-centre, randomised, open-label, parallel-group controlled pilot trial. *The Lancet Regional Health Europe*, **43**, Published online.
6. F. Huet, Mariano-Goulart, D., Aguilhon, S., Delbaere, Q., Lacampagne A., Fauconnier , J., Leclercq, F., Macia, j-C., Akodad, M., Jammoul, N., Prunier, F., Mewton, N., Angoulvant, D., Lozza, C., Soltani, S., Rodier, A., Grandemange, S., Anne-Marie Dupuy, A-M., Cristol, J-P., **Amico, M.**, Nagot, N., Roubille, F. (2024). Colchicine to prevent sympathetic denervation after acute myocardial infarction: the COLD-MI trial, *European Heart Journal*, **45** :9, 725–727
5. Zahar, S., Schneider, N. Makwana, A., Chapman, S., Corthesy, J., **Amico, M.** and Hudry, J. (2023). Dietary tryptophan-rich protein hydrolysate can acutely impact physiological and psychological measures of mood and stress in healthy adults. *Nutritional Neuroscience*, **26**: 4, 303–312.
4. Alliet P., Vandenplas Y., Roggero P., Jaspers S.N.J., Peeters S., Stalens J-P., Kortman G.A.M., **Amico M.**, Berger B. Sprenger N. et al. (2022). Safety and efficacy of a probiotic-containing infant formula supplemented with 2'-fucosyllactose: a double-blind randomized controlled trial. *Nutritional Journal*, **21**: 11.
3. **Amico, M.**, Van Keilegom, I. et Han, B. (2021). Assessing cure status prediction from survival data using receiver operating characteristic curves. *Biometrika*, **108**, 727–740.
2. **Amico, M.**, Van Keilegom, I. et Legrand, C. (2019). The single-index/Cox mixture cure model. *Biometrics*, **75**, 452–463.
1. **Amico, M.** et Van Keilegom, I. (2018). Cure models in survival analysis. *Annual Reviews of statistics and its Applications*, **5**, 311–342.

Conference proceedings

- 2024 **M. Amico**, Al Taweel, B., Nocca, D., & Picot, M-C. Comparaison de la gastrectomie longitudinale avec montage anti-reflux à la gastrectomie longitudinale dans le cadre de la prise en charge de patients obèses : analyse de non-infériorité par score de propension des données de la cohorte BAREVAL. *Revue d'Epidémiologie et de Santé Publique*, numéro spécial EPICLIN 2024.
- 2023 M. Saour, Blin C., Benjamin Bourdois, B., **Amico, M.**, Picot, M-C., Gaudard, P., Colson, P. Patient Blood Management in cardiac surgery: impact of an individualized strategy optimized by Erythropoietin and ferric carboxymaltose associated with ScvO₂, *Journal of Cardiothoracic and Vascular Anesthesia*, Special issue: 38th EACTAIC Annual Congress, **37**: 1, 31–32.

Thesis

Amico, M. (2018). *Cure models in Survival Analysis : From Modelling to Prediction Assessment of the cure fraction*. PhD thesis.

Amico, M. (2013). *On the introduction of cured observations in survival analysis : a literature review on cure models*. Master thesis.

Scientific presentations

- April 2026 **Workshop** - 2nd workshop Défi clé ceBBOc & programme IA pour la santé "IA Santé et biotherapies", Sète, France. "L'émulation d'essais cibles ou comment se rapprocher d'un essai contrôlé randomisé à partir de données observationnelles" (**Invited talk**).
- May 2025 **Conference** - 10th Channel Network Conference 2025, Liège, Belgium. "Emulating a Target Clinical Trial in the Context of Multiple Outcomes and Missing Data : the Example of the PROPENSLEEVE Study" (Contributed talk).
- April 2025 **Seminar** - Institut Montpelliérain Alexander Grothendieck, University of Montpellier, Montpellier, France. "Assessing Cure Status Prediction from Survival Data Using ROC Curves".
- May 2024 **Conference** - EPICLIN 2024, Dijon, France. "Comparaison de la gastrectomie longitudinale avec montage anti-reflux à la gastrectomie longitudinale dans le cadre de la prise en charge de patients obèses : analyse de non-infériorité par score de propension des données de la cohorte BAREVAL" (Contributed talk).
- June 2023 **Seminar** - Clinical Research and Epidemiology Unit, Montpellier University Hospital, Montpellier, France. "Les modèles de guérison en analyse de survie".
- Oct. 2018 **Conference** - Réunion Annuelle de la Société Belge de Statistique, Ovifat, Belgium. "Assessing Cure Status Prediction from Survival Data Using ROC Curves" (Poster).
- July 2017 **Conference** - 38th Annual Conference of the International Society for Clinical Biostatistics (ISCB), Vigo, Spain. "A ROC curve approach for cure status prediction from survival data" (Contributed talk).
- July 2017 **Conference** - 10th International Conference on Mathematical Methods in Reliability, Grenoble, France. "The Single-Index/Cox Mixture Cure Model" (**Invited talk**).
- May 2017 **Workshop** - 10th anniversary on the Institute of Statistics, Biostatistics and Actuarial Sciences - UCLouvain, Louvain-la-Neuve, Belgium. "The Single-Index/Cox Mixture Cure Model" (**Invited talk**).
- Dec. 2016 **Conference** - 9th International Conference of the ERCIM WG on Computational and Methodological Statistics, Sevilla, Spain. "The Single-Index/Cox Mixture Cure Model" (**Invited talk**).
- Sept. 2016 **Young Researchers Day**, UCLouvain, Louvain-la-Neuve, Belgium. "The Single-Index/Cox Mixture Cure Model".

- July 2016 **Conference** - XVIIIth International Biometrics Conference (IBC), Victoria, Canada. “The Single-Index/Cox Proportional Hazards Mixture Cure Model: A New Modelling Approach for the Mixture Cure Model” (Contributed talk).
- Dec. 2015 **Workshop** - Complex Time to Event data, Louvain-la-Neuve, Belgium. “Estimation of a Mixture Cure Model with a Single-Index Structure” (**Invited talk**).
- Aug. 2015 **Conference** - 36th Annual Conference of the International Society for Clinical Biostatistics (ISCB), Utrecht, The Netherlands. “Estimation of a Mixture Cure Model Estimation with a Single-Index Structure” (Poster).
- Nov. 2014 **Conference** - Réunion Annuelle de la Société Belge de Statistique, Louvain-la-Neuve, Belgium. “Mixture Cure Model Estimation with a Single-Index Structure” (Poster).
- Sept. 2014 **Young Researchers Day**, UCLouvain, Louvain-la-Neuve, Belgium. “Mixture Cure Model Estimation with a Single-Index Structure”.

Teaching

Currently

- 2025 – **Data Science In Lab** (12h/year - 2nd year Master’s degree “Statistique et Sciences des Données” – joint with Élodie Brunel-Piccinini) – University of Montpellier
- 2025 – **Modèle linéaire général** (20h/year - 1st year Master’s degree “Epidémiologie, Données de Santé et Biostatistiques”) – University of Montpellier
- 2023 – **Modèles linéaires généralisés et mixtes** (15h/year - 2nd year Master’s degree “Epidémiologie, Données de Santé et Biostatistiques” – joint with Isabelle Jaussent and Thibault Mura) - University of Montpellier
- 2023 – **Régression logistique et Poissonienne** (8h/year of practical activities - 1st year Master’s degree MIASHS - Lecturer : Catherine Trottier) - University of Montpellier Paul Valéry

Previously

- 2021 – 2022 **Module Prépro : Métiers de l’analyse, des études et du conseil : Outils Statistiques S4** (36h/year - 2nd year Bachelor’s degree in social sciences) – University of Montpellier Paul Valéry
- 2021 – 2022 **Statistiques descriptives et probabilités** (48h/year of practical activities - 1st year Bachelor’s degree MIASHS - Lecturer : Jean-Michel Kosianski) – University of Montpellier Paul Valéry
- 2021 – 2022 **Statistiques descriptives** (27h/year of practical activities - 1st year Bachelor’s degree in Economic administration) – University of Montpellier Paul Valéry
- 2021 – 2022 **Statistiques multivariées** (20h/year - 1st year Master’s degree “Gestion des Territoires et Développement Local” – joint with Jean-Michel Kosianski) – University of Montpellier Paul Valéry
- 2021 – 2022 **Statistiques et probabilités bivariées** (25h/year of practical activities - 2nd year Bachelor’s degree MIASHS - Lecturer : Pierre Lafaye de Micheaux) – University of Montpellier Paul Valéry
- 2021 – 2022 **Module Prépro : Métiers de l’analyse, des études et du conseil : Outils Statistiques S3** (36h /year - 2nd year Bachelor’s degree in social sciences) – University of Montpellier Paul Valéry
- 2013 – 2017 **Traitement statistique des données** (30h/year of practical activities – 2nd year Bachelor’s degree in Pharmacy - Lecturer : Catherine Legrand) – Université catholique de Louvain, Belgium
- 2013 – 2017 **Modèles linéaires avancés** (5h/year of practical activities – Master’s degree in Statistics - Lecturer : Catherine Legrand) – Université catholique de Louvain, Belgium
- 2013 – 2016 **Biostatistique** (90h/year of practical activities - 2nd year Bachelor’s degree in Veterinary sciences - Lecturer : Catherine Legrand) – Université catholique de Louvain, Belgium

- 2013 – 2016 **Plans expérimentaux** (20h/year of practical activities - Master's degree in Statistics and in Bio-engineering - Lecturer : Bernadette Govaerts and Patrick Bogaert) – Université catholique de Louvain, Belgium
- 2014 – 2016 **Analyse statistique multivariée** (45h/year of practical activities - 2nd year Bachelor's degree in Management - Lecturer : Johan Segers) – Université catholique de Louvain, Belgium
- 2013 – 2015 **SAS Data Management I** (20h/year – Master's degree in Statistics - Lecturer : Catherine Legrand) – Université catholique de Louvain, Belgium
- 2013 – 2014 **Statistique II : Inférence pour une ou deux variables** (45h/year of practical activities - 2nd year Bachelor's degree in Psychology - Lecturer : Bernadette Govaert) – Université catholique de Louvain, Belgium

Continuing education

Trainings provided through the plateforme technologique de Support en Méthodologie et Calcul Statistique (SMCS) of the Université catholique de Louvain, Belgium :

- 2015, 2016 Modèles multi-niveaux avec SPSS
- 2014 Plans d'expériences

Supervision

PhD students

- 2025 – 2028 **Guillaume Bouland** (*co-supervised with Caroline Mollevi - Montpellier University Hospital*)
- 2024 – 2028 **Sara Ibrahim** (*co-supervised with Nicolas Molinari - IDESP, Montpellier*)

Research Engineer

- 2026 **Mohamed-Yassir Errahmani**

Master's degree students (Internship)

- 2026 **Laura Cletz** (*joint with Élodie Brunel-Piccinini - IMAG, Montpellier*)
- Eunice Zoussou** (*joint with Tasnime Akbaraly - IDESP, Montpellier*)
- 2025 **Fanny Bez** - *Exploiter les données observationnelles à l'aide des essais émulsés: le défi du biais de temps immortel et la réponse du clonage.*
- Arthur Tena** - *Comparaison par paires généralisée pour plusieurs critères de jugement classés par ordre de priorité: win ratio vs. Net benefit of treatment vs. win Odds.*
- 2023 **Bader Al Taweel** - *Comparaison de la sleeve gastrectomie avec fundoplicature selon Nissen et de la sleeve gastrectomie chez des patients obèses sur la perte d'excès de poids avec un score de propension: l'étude Propensleeve.*

Master's degree students (Project supervision)

- 2026 **Sofia Ben-Atmane and Inès Camus** (*joint with Benjamin Cuer - IRD, Montpellier*) - *L'IA générative peut-elle prendre la place d'un biostatisticien ? Application au cas du calcul de taille d'échantillon dans les essais contrôlés randomisés.*
- 2025 **Ousmane Diallo, Lamia Oulebsir and Naima Radouan** - *La problématique des données manquantes en statistique.*

Funding

- 2026 Bourse de master du pôle Biologie-Santé – University of Montpellier (*joint with Élodie Brunel-Piccinini*)
- 2025–2027 Programme d'Excellence I-SITE, University of Montpellier - Lauréat chaire de professeur junior
- 2024–2028 Chaire de Professeur Junior, Agence Nationale de la Recherche (ANR)

Referee

Biometrics, TEST, Journal of affective disorders, Statistical Methods and Applications.

Service to the profession

Member of the organising committee of the 13th Rencontres R (RR'2027), Montpellier, France, June 16–18, 2027

Member of the scientific programme committee of the 20th conférence francophone d'Épidémiologie CLINique (EPICLIN), Montpellier, France, May 20–22, 2026

Member of the organising committee of the 20th conférence francophone d'Épidémiologie CLINique (EPICLIN), Montpellier, France, May 20-22, 2026