

Curriculum Vitae – João Conde, PhD

PERSONAL DETAILS

Name: João Diogo Osório de Castro Conde

Date of Birth: February 5th 1982, Lisbon, Portugal.

Languages: Portuguese (Native)

English (Proficient)

Spanish (Proficient)

Professional Website: <https://www.conde-nanolab.com/>

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ORCID: [0000-0001-8422-6792](https://orcid.org/0000-0001-8422-6792) ; Scopus ID: [56992468300](https://scopus.org/56992468300)

Hobby: Painting



SUMMARY

João Conde is a **Group Leader** (*Cancer NanoMedicine Lab*) at **Comprehensive Health Research Centre (CHRC) - NOVA Medical School, Full Professor of Precision Medicine and Oncogenomics** in Mestrado Integrado em Medicina at **NOVA Medical School, Universidade Nova de Lisboa**. He holds a **Habilitation** (Agregação) **in Biomedicine (2023)**, with a **specialization in Precision Medicine and Oncogenomics**. His expertise spans **oncogenomics, nanomedicine and gene therapy, with a strong focus on precision medicine in oncology**.

In 2013, he received his **PhD in Biology**, specializing in Nanobiotechnology, from the **Universidade Nova de Lisboa** and the **Universidad de Zaragoza**, under the **FP7 European Consortium NanoScieE⁺ – NANOTRUCK: multifunctional nanoparticles for gene silencing**. After, he was a **Marie Curie Fellow** at the **Massachusetts Institute of Technology, Harvard-MIT Division for Health Sciences and Technology, and School of Engineering and Materials Science at Queen Mary University of London**. From 2017 to 2019, he was a **Junior Investigator** at **Instituto de Medicina Molecular**. **In 2019, he won an ERC Starting Grant (1.5M€) from the European Research Council to build a genetic biobarcode to profile breast cancer heterogeneity. Since receiving the ERC Starting Grant, he has mentored more than 20 students and post-docs (including 2 Marie Curie fellows)**. Since his **PhD**, he has published **more than 60 publications in journals with impact factors (IF) >15**, and since his **Habilitation (Agregação) in Biomedicine**, he has published **more than 35 publications in top-tier journals**. Moreover, he is also a **leader of multidisciplinary research teams and projects in precision medicine, oncogenomics and nanomedicine**.

He is also **a co-founder and shareholder of the biotech company TargTex, Targeted Therapeutics for Glioblastoma Multiforme with 18M€ funding**. Since 2020, he has also been a **senior member of the Global Burden of Disease (GBD) Consortium** at the **Institute for Health Metrics and Evaluation (IHME), University of Washington**. In 2023, he partnered with **Vector Bioscience Cambridge and AstraZeneca to develop RNA-based cancer therapies from the European Innovation Council (2.5M€)**. In 2023, was elected for the **Scientific Advisory Board of FCT: Fundação para a Ciência e a Tecnologia**. Since 2024, he has been a member of the **Lisbon Academy of Sciences** and has been on the **Scientific Advisory Board of Vector Bioscience**

Cambridge. From March 2024 to November 2025, he was the **Vice Dean for Research at NOVA Medical School.** In 2025, NOVA Medical School was awarded ~6.5M€ (**FEDER and Haddad Foundation**) to build **a preclinical-to-clinical hub and a medical innovation center, with João Conde as one of the scientific coordinators.**

The main aspects related to the recognition and diffusion of his early contributions are: **more than 160 articles (average impact factor of >25 in the last 5 years) in top-tier journals** of Cancer Therapy, Oncology, Precision Medicine, Nanotechnology/Materials Science and NanoMedicine (*Nature, The Lancet, Nature Materials, Nature Reviews Materials, The Lancet Oncology, Nature Nanotechnology, JAMA Oncology, Nature Communications, The Lancet Gastroenterol Hepatol, Nature Rev Methods Primers, PNAS, Accounts of Chemical Research, The Lancet Child Adolesc Health, Progress in Materials Science, ACS Nano, Advanced Materials, JACS, Angewandte Chemie, Advanced Functional Materials, Trends in Cancer, Trends in Biotechnology, Biomaterials, etc.*), **more than 30 articles are as 1st author and nearly 70 articles as corresponding author, cited more than 27000 times (h-index 64).** **Nearly 40** of them have been selected as **Covers** of Journals such as *Nature Nanotechnology* (COVID-19 Special Issue), *Nature Materials, The Lancet, The Lancet Oncology, The Lancet Public Health, The Lancet Neurology, ACS Nano, Adv. Functional Materials, JAMA Oncology, JACC, Trends in Cancer, BioTechniques, etc.* He is also a member of the **editorial board of several international journals** and **editor and reviewer for leading journals** such as *Nature Reviews Cancer, Nature Materials, Nature Biotechnology, Nature Communications, Nature Protocols, Nature Reviews Bioengineering, PNAS, Accounts Chemical Research, Chemical Reviews ACS Nano, Advanced Materials,* among others.

In addition, **12 international patents** on nanomedicine-based platforms for cancer therapy and diagnosis were submitted and/or approved. He was also awarded **several international awards**, including the **2024, 2023 and 2022 World's Top 2% Scientists list by Stanford University**, the **2021 Biomaterials Science Emerging Investigator**, the **2021 Top 2% Most cited in Nanoscience/Nanotechnology from PLOS Biology**, the **Nanomaterials 2020 Young Investigator Award**, the **Wellcome Image Awards 2017**, the **2016 Nano-Micro Letters Researcher Award** and the **2016 National Cancer Institute Image award**.

Teaching activities include lectures and courses across multiple programs at **NOVA Medical School** and other faculties within Universidade NOVA de Lisboa. In 2020, João Conde began teaching **Genetics** in the **Master in Medicine (Mestrado Integrado em Medicina)** at **NOVA Medical School**, followed in 2021 by contributions to the **Master in Biochemistry for Health (Human Genetics, ITQB-NOVA, and NOVA Medical School)** and the **International Master in Biomedical Research (Translational and Precision Medicine)**. Since 2022, he has been teaching in the **PhD in Health Sciences** at **NOVA Medical School**, focusing on **New Cellular and Molecular Therapies**. In 2025, this role expanded further to include invited classes in the **Master in Medicine (Mestrado Integrado em Medicina)**, **Digital Health** curricular unit, and the **Master in Impact Entrepreneurship and Innovation** and the **Master in Clinical Research Management** at **NOVA School of Business and Economics** and **NOVA Medical School**, within the **Medical Advances Specifics** curricular unit. This teaching trajectory highlights consistent engagement in multidisciplinary education spanning genetics, nanomedicine, molecular biology, precision medicine and innovation, contributing to both basic and advanced biomedical training at the undergraduate, master's and doctoral levels.

EDUCATION

- **Habilitation** (Agregação) in **Biomedicine**, with a specialization in **Precision Medicine**, **NOVA Medical School, Universidade Nova de Lisboa**, Portugal, 2023.
- **PhD in Biology**, Specialty **Nanobiotechnology**, *Summa cum laude*, **Universidade Nova de Lisboa**, Portugal and Instituto de Nanociencia de Aragón at **Zaragoza University**, Spain, 2013.
- **MSc in Biology**, *Summa cum laude*, **Universidade Lusófona de Humanidades e Tecnologias**, Portugal, 2008.

CURRENT POSITIONS

- July 2025 – Present: **Full Professor** at **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).
- January 2024 – Present: **Scientific Advisory Board** at **Vector Bioscience Cambridge** (UK).
- November 2023 – Present: **Coordination member** of the Drug Discovery and Advanced Therapies group of the **NOVA Health Strategic Platform** at **Universidade Nova de Lisboa** (Portugal).
- March 2023 – Present: **Scientific Advisory Board** (Health and Life Sciences board) at **FCT: Fundação para a Ciência e a Tecnologia** (Portugal).
- March 2020 – Present: **Senior Member** of the **Global Burden Disease** (GBD), at the **Institute for Health Metrics and Evaluation** (IHME), University of Washington (US).
- February 2020 – Present: **Group Leader** (OncoNano Lab), **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).
- February 2020 – June 2025: **Assistant Professor** at **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).
- September 2019 – Present: Co-founder and Shareholder of **TargTex SA start-up company: Targeted therapies for the treatment of brain cancer** (Portugal).

PREVIOUS POSITIONS

- March 2024 – November 2025: **Vice-Dean for Research** at **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).
- March 2024 – November 2025: **Steering Committee** at **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).
- March 2024 – November 2025: **Value Creation Council** at **Universidade Nova de Lisboa** (Portugal).
- March 2024 – November 2025: **Strategic Council for Innovation** at **Universidade Nova de Lisboa** (Portugal).
- October 2017 – January 2020: **Junior Researcher** at **Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa** (Portugal).
- April 2016 – April 2017: **Marie Curie Early-Stage Career Fellow** at School of Engineering and Materials Science at **Queen Mary University London** (UK).
- February 2014 – April 2016: **Marie Curie Early-Stage Career Fellow** at the **Massachusetts Institute of Technology (MIT)**, **Harvard–MIT Division for Health Sciences and Technology**, **Institute for Medical Engineering and Science** (US).
- January 2010 – December 2013: **Science and Technology Foundation PhD Fellow** (FCT, SFRH/BD/ 62957/2009), **Universidade Nova de Lisboa** (Portugal) and **Zaragoza University** (Spain).

- January 2009 – January 2010: Research fellowship (PTDC/BIO/66514/2006), Research Center for Human Molecular Genetics, **FCT/UNL, Universidade Nova de Lisboa** (Portugal).
- September 2007 – December 2008: Under-graduate fellowship, Molecular Genetics Department at **NOVA Medical School, Universidade Nova de Lisboa** (Portugal).

BACKGROUND

- Cancer Nanomedicine, Nanotechnology and Materials Science.
- Precision Medicine and Oncogenetics/Oncogenomics.
- Oncology and Biomedicine.
- Multifunctional nanomaterials for Cancer therapy and diagnostics.
- Genetic therapies based on DNA/RNA, siRNA/miRNA.
- Gene therapy, drug delivery, tumor targeting.
- Smart clinical platforms based on new materials and technologies for local therapy in cancer.
- Gene therapy/Antisense DNA/RNA Interference/microRNA, gene editing CRISPR/Cas9.
- *In vivo* cancer mouse models (breast, colon, gastric, liver, glioblastoma, prostate, pancreatic, ovarian and lung cancer) – tumour induction and administration (systemic and local) of anti-cancer therapies.
- Translational research and clinical applications of nanomedicine and precision oncology.
- Machine learning and AI in nanomedicine, computational modeling for nanomaterial optimization.
- Public health and epidemiology, expertise in *Global Burden of Disease* (GBD) research.
- Regenerative medicine and tissue engineering, biomimetic hydrogels and scaffold-based therapies.
- Immunotherapy and immune engineering, macrophage-targeted and nanovaccine therapies.
- Biomedical imaging and theranostics, development of tumor-tracking and image-guided therapies.
- Bioconjugation and bioengineering, functionalized nanomaterials for controlled drug release.
- Emerging technologies in medicine, smart theranostics, and opto-theranostics.

TEACHING

- 2025 – Present: Invited classes of the **Master Course in Medicine** (Unidade Curricular de Saúde Digital do Mestrado Integrado em Medicina), **NOVA Medical School, Universidade NOVA de Lisboa**.
- 2025 – Present: Invited classes of the **Master in Impact Entrepreneurship and Innovation** and **Master in Clinical Research Management**, Curricular Unit Medical Advances Specifics, **NOVA School of Business and Economics** and **NOVA Medical School, Universidade NOVA de Lisboa**.
- 2022 – Present: Invited classes of the **PhD in Health Sciences**, Curricular Unit New Cellular and Molecular Therapies, **NOVA Medical School, Universidade NOVA de Lisboa**.
- 2021 – Present: Invited classes of the **Master in Biochemistry for Health**, **FCT/UNL**, Curricular Unit Human Genetics, **ITQB-NOVA** and **NOVA Medical School, Universidade NOVA de Lisboa**.
- 2021 – Present: Invited classes of the **Bachelor in Biology**, **ISPA - Instituto Universitário de Ciências Psicológicas, Sociais e da Vida**.
- 2021 – Present: Invited classes of the **International Master in Biomedical Research**, Curricular Unit Translational & Precision Medicine, **NOVA Medical School, Universidade NOVA de Lisboa**.
- 2020 – Present: **Genetics** of the **Master in Medicine** (Unidade Curricular de Genética do Mestrado Integrado em Medicina), **NOVA Medical School, Universidade NOVA de Lisboa**.
- 2010 – 2013: Invited Lab classes of **Molecular Diagnostics and Bionanotechnology** of the **Master Course in Molecular Genetics and Biomedicine**, **FCT/UNL, Universidade NOVA de Lisboa**.

PEDAGOGICAL PRODUCTION

- 2024 – Present: Video workshops about Oncology and AI for **Digital Data Design Institute at Harvard**, collaboration **Harvard Business School** and **NOVA Medical School**.

MEMBER

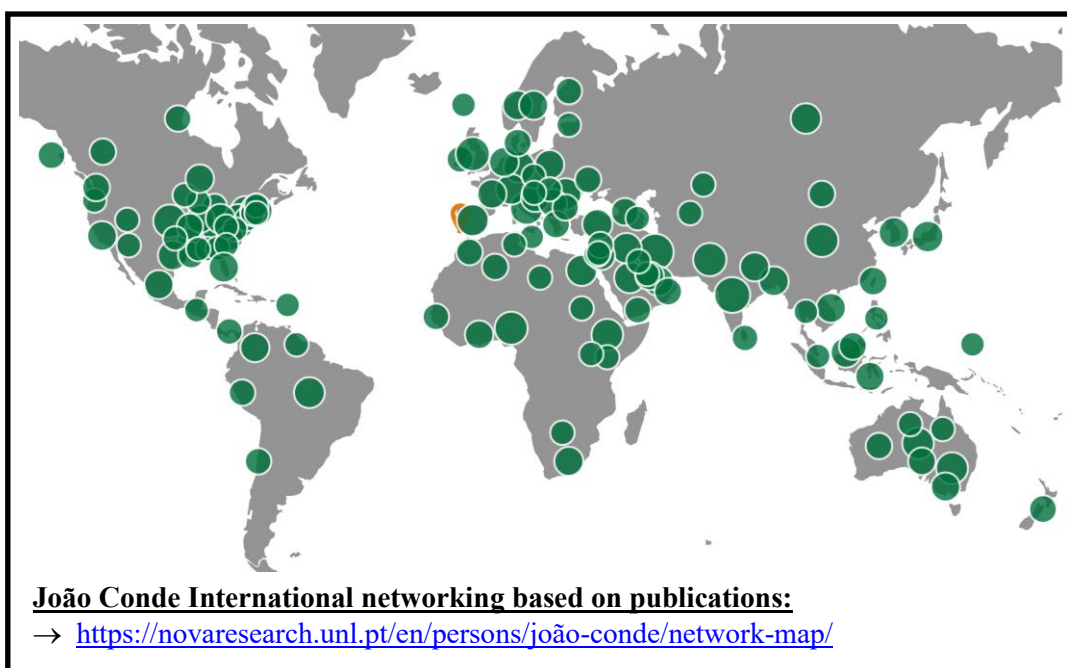
- April 2024 – Present: Member of the **Lisbon Academy of Sciences**, Portugal.
- March 2020 – Present: Senior Member of the **Global Burden Disease (GBD)** consortium, **Institute for Health Metrics and Evaluation (IHME)**, University of Washington (US).

MENTORING EXPERIENCE

- Jordi Martinez-Esain, **Marie Curie Fellow**, Nova Medical School (Apr 2025-to present).
- Jiemin Wang, **Marie Curie Fellow**, Nova Medical School (Apr 2025-to present).
- Beatriz Matos, **MSc student**, Nova Medical School and FCT-NOVA (Jan 2025-to present).
- Bruna Franco, **MSc student**, Nova Medical School, Gulbenkian Institute for Molecular Medicine and Instituto Superior Técnico (Feb 2025-Nov 2025).
- Joana Coutinho, **MSc student**, Nova Medical School and Instituto Politécnico de Setubal (Jan 2025-Dec 2025).
- Rita Rafael, **MSc student**, Nova Medical School (Sept 2024-Nov 2025).
- Emily Rohrmoser, **MSc student**, Nova Medical School (Sept 2024-Sept 2025).
- Diogo Dias, **BSc student**, Nova Medical School (Jan 2024-Sept 2024).
- Leonardo di Filippo, **PhD student**, School Pharmaceutical Sciences/UNESP (Jan 2023-Ago 2024).
- Alazne Moreno, **PhD student**, University of Barcelona (Sept 2023-Jan 2024).
- Cristina Volpini, **Erasmus student**, University of Pavia (Jan 2023-Sept 2023).
- Alessia Privitera, **Erasmus student**, University of Pavia (Jan 2023-Sept 2023).
- Marta Santos, **MSc student**, Nova Medical School and FCT-NOVA (Sept 2022-Sept 2023).
- Mariana Pereira, **MSc student**, Nova Medical School and Universidade do Algarve (Sept 2022-Sept 2023).
- Pedro Ribeiro, **PhD student**, Nova Medical School (Sept 2022-to present).
- Catarina Martins, **PhD student**, Nova Medical School and CIC biomaGUNE (Sept 2022-to present).
- João Pais, **PhD student**, Universidade de Coimbra and Nova Medical School (Sept 2022-to present).
- Ana Cunha, **BSc student**, Nova Medical School (Mar 2022-Jul 2022).
- Carolina Melo, **MSc student**, Faculdade Medicina, Universidade de Coimbra (Mar 2022-Jul 2022).
- Pedro Rosado, **BSc student**, Nova Medical School (Mar 2022-Apr 2022).
- Beatriz Salvado, **BSc student**, Nova Medical School (Feb 2022-Mar 2022).
- Ana Rita Mariano, **BSc student**, Nova Medical School (Feb 2022-Mar 2022).
- Jhenifer Oliveira, **PhD student**, Nova Medical School (Oct 2021-to present).
- Diana Castro Peixoto, **PhD student**, Universidade de Coimbra & Nova Medical School (Sept 2021-to present).
- Joana Amorim, **MSc student**, Nova Medical School (Sept 2021-Oct 2022).
- Diana Sousa, **PhD student**, Nova Medical School (Sept 2020-to present).
- Charlotte Baker, **PhD student**, Instituto de Medicina Molecular (Oct 2017-Oct 2019).
- Daniel Fulop, **MSc student**, Harvard University, Sophomore Internship (Jun 2015-Feb 2016).
- Cristina Violi, **MSc student**, Socrates-Erasmus Programme Italy, (Feb 2013-Aug 2013).
- André Salvada, **BSc student**, Universidade Nova de Lisboa, (Jan 2013-Mar 2013).
- Pedro Dionisio, **BSc student**, Universidade Nova de Lisboa, (Mar 2011-Sept 2011).

INTERNATIONAL NETWORKING/COLLABORATORS

• Main collaborators: **Massachusetts Institute of Technology (US), Yale University (US), Harvard Medical School (US), Harvard University (US), Broad Institute of MIT and Harvard (US), Brigham and Women's Hospital (US), University of Washington (US), Dana-Farber Cancer Institute (US), Duke University (US), University of Pennsylvania (US), Tel Aviv University (Israel), University of British Columbia (Canada), Johns Hopkins University (US), Case Western Reserve University (US), University of Cambridge (UK), University of Oxford (UK), University College London (UK), University of Turin (IT), University Hospital Düsseldorf (Germany), Dublin Institute of Technology (Ireland), Shanghai JiaoTong University (China), University of Glasgow (UK), Fundação Champalimaud (Portugal), iMed.UL (Portugal), Universidade Coimbra (Portugal), among others.**



RESEARCH EVALUATOR

- European Research Executive Agency, Brussels, Belgium.
- European Research Council, Brussels, Belgium.
- European Commission and Innovative Health Initiative (IHI), Brussels, Belgium.
- The Swiss National Science Foundation, Switzerland.
- Instituto de Medicina Molecular, Faculdade de Medicina de Lisboa, Portugal.
- Kingdom of Saudi Arabia Ministry of National Guard – Health Affairs, Saudi Arabia.

INSTITUTIONAL PROJECTS AS SCIENTIFIC COORDINATOR

- LISBOA2030-FEDER-01317200 – Preclinical-to Clinical Innovation Hub for Nova Medical School (2025-2027). Coordinator. *Funding 3.2M€*
- Haddad Nova Medical Innovation Center – The Haddad Foundation (2025-2029). Co-coordinator. *Funding 3.25M€*

RESEARCH PROJECTS AS PI

- FCT Grant LISBOA2030-FEDER-00862500-14998 – OncoNanoAI: Artificial intelligence to discover the next generation of personalized nanoparticles for triple-negative breast cancer therapy (2025-2027). *Funding 250K€*
- European Research Council – ERC Starting Grant: ERC-StG-2019-848325 – *GelGeneCircuit*: Profiling therapy and heterogeneity in cancer using bioresponsive nanohydrogels for the delivery of logic multicolor genetic circuits (2019-2025). *Funding 1.5M€*
- FCT Grant PTDC/BTM-MAT/4738/2020 – Biomimetic cell membrane-coated vitamin E-based micelles for multimodal pancreatic cancer nanotheranostics (2020-2023). *Funding 250K€*
- FCT Stimulus of Scientific Employment CEECIND/01688/2017 – Hydrogel scaffolds for delivery of gene therapies (2018-2019). *Funding 230K€*

RESEARCH PROJECTS with INDUSTRY

- RNA-based cancer therapies. By *Vector Bioscience Cambridge* and *Astrazeneca* - European Innovation Council – EIC Transition Grant (2023-2026). *Funding 2.5M€*
- Clinical validation of NANO-PL: a hydrogel-based formulation of a small molecule for a highly targeted therapy against Glioblastoma Multiforme (GBM). By *TargTex SA* - European Innovation Council – EIC Accelerator. *Funding 14M€*

RESEARCH PROJECTS AS TEAM MEMBER or CONSULTANTS

- Exploring the role of biomechanical forces in synapse formation as a strategy to combat neurodegeneration. *FCT Grant, LISBOA2030-FEDER-16494-SYN3D* (2025-2027, *as consultant*).
- Specific RANK pathway inhibition for breast cancer-targeted therapy. *FCT Grant, LISBOA2030-FEDER-00677700-15681*(2025-2027).
- Innovative signaling inhibition in breast cancer using folate-targeted lipid nanoparticles. *Gilead GÉNESE*, 26592 (2025-2027).
- PAIR-Lung: Patient-derived lung cancer organoids for recreating tumor spread through AIR spaces phenomenon. *FCT Grant, 2022.07775.PTDC* (2022-2024).
- Combined immUNotherapeutiC approach for targeting bone marrow microenvironment in Multiple Myeloma. *FCT Grant, PTDC/MED-ONC/1215/2021* (2021-2024).
- Albumedix Ltd. - Recombinant albumin conjugates for cancer therapy (2018).
- SuprHAPolymers - Engineering self-assembly of hyaluronan-based glycopolymers with peptides (2016).
- NOF Corporation - Characterization of PEG-based hydrogels (2014-2015).
- NANOTRUCK- Multifunctional gold nanoparticles for gene therapy. *EU, ERANET-NanoSciera⁺* (2012-2014).
- Silence is golden (siAu) - Silencing the silencers via multifunctional gold nanoconjugates towards cancer therapy. *FCT Grant, FFCT/FCT/UNL, PTDC/BBB-NAN/1812/2012*.

- Nanosystems for delivery of caged compounds. *FCT Grant*, FFCT/FCT/UNL, PTDC/QUI-QUI/112597/2009.
- Sensitive and selective detection of DNA/RNA based on functionalized gold nanoparticles - application to pathogen detection, mutation detection and RNA quantification. *FCT Grant*, FFCT/FCT/UNL, PTDC/BIO/66514/2006.

START-UP COMPANIES

- 2019 – Present: Co-founder of *TargTex SA*, Portuguese start-up: Targeted therapies for the treatment of brain cancer. ***Portugal Ventures Funding 2M€ + Private Funding, Basi 2M€ + EIC Accelerator 14M€.***

PRIZES AND AWARDS

- 2024 - **Basinnov Innovation Award 2024** (honourable mention).
- 2024 - **Bluepharma Innovation Award 2023** (honourable mention).
- 2023 - **World's Top 2% Scientists list**, Stanford University.
- 2022 - **World's Top 2% Scientists list**, Stanford University.
- 2021 - **Nanomaterials 2020 Young Investigator Award**.
- 2021 - **Top 2% Most Cited Researchers in Nanoscience and Nanotechnologies**, PLOS Biology.
- 2021 - **2021 Biomaterials Science Emerging Investigators**, Royal Society of Chemistry.
- 2019 - **ERC Starting Grant**: ERC-StG-2019-848325, European Research Council, EU.
- 2018 - **Junior Investigator**: FCT Stimulus of Scientific Employment, (CEECIND/01688/2017) National Science Foundation, PT.
- 2017 - **Wellcome Image Awards 2017**: Wellcome Trust, UK.
- 2016 - **Nano-Micro Letters Researcher Award**, Nature Research Society.
- 2016 - **National Cancer Institute Image award**: Cancer close up, US.
- 2013 - **Marie Curie International Outgoing Fellowship** for Career Development, Marie Skłodowska-Curie actions (FP7-PEOPLE-2013-IOF).
- 2009 - **PhD Fellowship** - National Science Foundation - PhD Grant (FCT, SFRH/BD/62957/2009), PT.

PATENTS

Inventor on **12 patent families in the field of nanomedicine**, covering technologies such as TRPV2 antagonists, nanoparticles for targeted therapy, microRNA delivery systems, and smart biomaterials. **A total of 27 patent applications submitted**, with **8 patents granted** across various jurisdictions (USA, Europe, Japan, Australia, among others). The patent family related to TRPV2 antagonists is licensed to the spin-off TargTex, of which he is a co-founder.

1. Theranostic Nanoprobes for Overcoming Cancer Multidrug Resistance and Methods. U.S. Application No. 62/118101. MIT Case No. 17685K, MIT Docket No. 17685.117921.
2. RNA Triple Helix Structures, Compositions, and Methods. U.S. Application No. 62/216969. MIT Case No. 18323 PCT, MIT Docket No. 17648-0205.
3. Hydrogel particles, compositions, and methods. U.S. Application No. 62/339434.
4. Micro-RNA delivery compositions, devices, and methods. U.S. Application No. 62/353622.
5. Functionalized nanoparticles and compositions for cancer treatment and methods. U.S. Application No. 62/334538.

6. Hydrogel particle of cystamine cross-linked dextran aldehyde containing imine conjugated doxorubicin and RGD peptide for chemotherapy. U.S. Application No. PCT/US2017/033542.
7. TRPV2 Antagonists. WO EP CN JP AU BR CA EA SG Application No. PCT/PT2018/050035.
8. TRPV2 Antagonists. U.S. Application No. US11273152B2.
9. Metal-organic framework nanoparticles and hydrogels and uses thereof, PCT/EP2024/085805, 11/12/2024 (pending, Licensed).
10. Surfactant-based cellulose hydrogel methods and uses thereof, PCT/IB2025/051694, 17/02/2025, (pending).
11. Self-immolative micelle, methods and uses thereof, EP25165757, 24/03/2025 (pending).
12. Intranasal delivery for brain cancer and uses thereof (submitted).

JOURNAL EDITOR

- **Editorial Board**, ACS Nano Medicine (2025 - to present).
- **Guest Editor**, Carbohydrate Polymers, Elsevier (2025 - to present).
- **Editorial Board**, Open Nano, Elsevier (2025 - to present).
- **Editorial Board**, ACS Chemical & Biomedical Imaging (2024 - to present).
- **Editorial Board**, Exploration, Wiley (2023 - to present).
- **Editorial Board**, Frontiers in Chemistry (2022 - to present).
- **Editorial Board**, VIEW, Wiley (2021 - to present).
- **Review Editor**, Frontiers Genetics - Toxicogenomics (2021 - to present).
- **Book editor**, “Handbook of Nanomaterials for Cancer Theranostics” by Elsevier (2017 - to present).
- **Volume Editor**, in the Advanced Nanomaterials Series, Elsevier (2016 - to present).
- **Editorial Board**, Nano Biomedicine and Engineering Journal (2016 - to present).
- **Associate Editor**, Frontiers in Bioengineering and Biotechnology (2015 - to present).
- **Associate Editor**, Frontiers in Molecular Biosciences (2015 - to present).
- **Associate Editor**, Frontiers in Materials (2015 - to present).
- **Guest Associate Editor**, Frontiers in Chemistry (2014 - to present).

JOURNAL REVIEWER

• Nature Reviews Cancer; Nature Materials; Nature Biotechnology; Nature Communications; Nature Protocols; Nature Reviews Bioengineering; PNAS; Accounts Chemical Research; Chemical Reviews; Advanced Drug Delivery Reviews; Progress Polymer Science; Advanced Materials; ACS Nano; Advanced Functional Materials; Nature Asia Materials; Chemical Science; Theranostics; Small; Journal Controlled Release; Nanoscale; Analytical Chemistry; Advanced Healthcare Materials; Scientific Reports; Nanomedicine; Nanotoxicology; Nanomedicine: NBM; Acta Biomaterialia; Journal Materials Chemistry B; PLoS ONE; ACS Applied Materials & Interfaces; Bioconjugate Chemistry; Journal Biomedical Nanotechnology; Sensors & Actuators: B Chemical; Advanced Science; Nanoscale Research Letters; Colloids and Surfaces B: Biointerfaces; Journal of Nanobiotechnology; among others.

Web of Science Review Metrics: <https://www.webofscience.com/wos/author/record/1246512>

PUBLICATIONS

• More than **160 articles** in high impact journals in fields of Nanomedicine, Oncology and Cancer Therapies and Biomedicine (*Nature* **IF50.5**, *The Lancet* **IF202.7**, *Nature Materials* **IF43.8**, *Nature Reviews Materials* **IF76.7**, *The Lancet Oncology* **IF54.4**, *Nature Nanotechnology* **IF39.2**, *Chemical*

Scociety Reviews **IF46.2**, *JAMA Oncology* **IF31.8**, *The Lancet Gastroenterology & Hepatology* **IF45.0**, *Nature Communications* **IF14.9**, *The Lancet Child & Adolescent Health* **IF37.7**, *Military Medical Research* **IF34.9**, *The Lancet Public Health* **IF25.4**, *PNAS* **IF11.2**, *Accounts of Chemical Research* **IF22.4**, *Progress in Materials Science* **IF39.6**, *Advanced Materials* **IF30.8**, *Materials Today* **IF26.4**, *Nano Today* **IF16.9**, *ACS Nano* **IF15.9**, *JACS* **IF15.4**, *Angewandte Chemie* **IF15.3**, *Advanced Functional Materials* **IF18.8**, *Advanced Science* **IF17.5**, *Advanced Drug Delivery Reviews* **IF13.3**, *ACS Central Science* **IF14.5**, *Trends in Cancer* **IF14.2**, *Trends in Biotechnology* **IF19.5**, *Matter* **IF15.6**, *Biomaterials* **IF12.5**, *The Lancet Child & Adolescent Health* **IF11.3**, *Journal of Controlled Release* **IF7.9**, *Biosensors & Bioelectronics* **IF10.6**, *Nature Asia Materials* **IF10.5**).

- More than **30 articles as 1st author**, and more than **75 articles as corresponding author**, all cited **>27000 – h-index 64, Google Scholar; >20000 – h-index 60, Scopus**.

- **Nearly 40** of them have been selected as **cover page of top-tier journals** such as *The Lancet*, *Nature Nanotechnology* (Covid-19 Special Issue), *The Lancet Oncology*, *Nature Materials*, *Trends in Cancer*, *Nature Reviews Materials*, *The Lancet Neurology*, *JAMA Oncology*, *ACS Nano*, *The Lancet Child & Adolescent Health*, *JACC*, *ACS Central Science*, *The Lancet Public Health*, *Adv. Functional Materials*, *JACS*, *Angewandte Chemie*, *ACS Sensors*, *WIREs Nanomedicine & Nanobiotechnology*, *Biomaterials Science*, *ACS Applied Bio Mat*, *Adv. Healthcare Materials*, *Analytical and Bioanalytical Chemistry* and *BioTechniques*.

PUBLICATIONS (75 articles as * corresponding author)

(160+ publications, Citations: >27000 h-index 64, Google Scholar; >20000 h-index 60, Scopus)

1. “Structurally and functionally optimized silk fibroin-alginate-based biomimetic scaffolds reinforced with nanobioceramics for bone tissue engineering applications”. T-M.N. Nguyen, N-H.H. Le, M. Murugesan, G. Janarthanan, P. Manivasagan, E-S. Jang, Y. Li, V.H.G. Phana, S. Vijayavenkataraman*, **João Conde*** and T. Thambi*. *Journal of Nanobiotechnology* (2025).
2. “Burden of 375 diseases and injuries, risk-attributable burden of 88 risk factors, and healthy life expectancy in 204 countries and territories, including 660 subnational locations, 1990–2023”. **João Conde** and GBD Collaborators - Global Burden of Disease (GBD) Consortium. *The Lancet* (2025).
3. “Global age-sex-specific all-cause mortality and life expectancy estimates for 204 countries and territories and 660 subnational locations, 1950–2023”. **João Conde** and GBD Collaborators - Global Burden of Disease (GBD) Consortium. *The Lancet* (2025).
4. “Global burden of 292 causes of death in 204 countries and territories and 660 subnational locations, 1990–2023”. **João Conde** and GBD Collaborators - Global Burden of Disease (GBD) Consortium. *The Lancet* (2025).
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159. “Genotoxic effects of occupational exposure to lead and influence of polymorphisms in genes involved in lead toxicokinetics and in DNA repair”. J. García-Lestón, J. Roma-Torres, M. Vilares, R. Pinto, J. Prista, J.P. Teixeira, O. Mayan, **João Conde**, M. Pingarilho, J.F. Gaspar, E. Pásaro, J. Méndez and B. Laffon. *Environment International* (2012).
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163. “RNA Quantification using Gold Nanoprobes - application to Cancer Diagnostics”. **João Conde**, J.M. de la Fuente and P.V. Baptista. *Journal of Nanobiotechnology* (2010).
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BOOKs and BOOK CHAPTERS (* corresponding author)

1. “Unveiling MicroRNA Biomarkers for Breast Cancer Sub-typing Using Discriminative Models” 1st Edition, J. Mota, J. Romano, A.R. Grosso, **João Conde**, Bárbara Mendes and D. Semedo. in EPIA Conference on Artificial Intelligence, *Springer*, 2025.
2. “Handbook of Nanomaterials for Cancer Theranostics” 1st Edition, *Editor: João Conde*, Elsevier, 2018.

3. “Displaying biofunctionality on materials through templated self-assembly”, K. Shuturminska, C. O'Malley, D.W.P. Collis, **João Conde**, H.S. Azevedo, in *Self-Assembling Biomaterials: Molecular Design, Characterization and Application in Biology and Medicine*, Elsevier, 2018.
4. “Empowering the potential of cell-penetrating peptides for targeted intracellular delivery via molecular self-assembly”, Y. Shi, **João Conde**, H.S. Azevedo, in *Peptides and Peptide-based Biomaterials and their Biomedical Applications*, Eds. A. Sunna, A. Care, P. Bergquist, *Springer International Publishing AG*, Cham, 2017.
5. “Multifunctional Gold Nanocarriers for Cancer Theranostics – From bench to bedside and back again?” **João Conde***, F. Tian, P.V. Baptista., J.M. de la Fuente. in *Nano-Oncologicals: New Targeting and Delivery Approaches* (2014), *Springer Science+Business Media. Controlled Release Society*.
6. “RNA Quantification Using Noble Metal Nanoprobes: Simultaneous Identification of Several Different mRNA Targets Using Colour Multiplexing and Application to Cancer Diagnostics.” **João Conde**, G. Doria, J.M. de la Fuente and P.V. Baptista*. in *Nanoparticles in Biology and Medicine: Methods and Protocols Series* (2012). *Humana Press, Springer Protocols*.

CONFERENCE & SEMINAR PRESENTATIONS

- Speaker at Commemorations of the 25th anniversary of Escola Superior de Saúde do Instituto Politécnico de Setúbal (ESS/IPS), in association with collaborations in the Bachelor’s Degree in Biomedical Technology and the Master’s Degree in Biomedical Engineering, March 2025, Portugal (*Invited*).
- Roundtable Chair at Cascais International Health Forum by Forum Saude XXI, March 2025, Portugal (*Invited*).
- Speaker at Jornadas Biolspianas, Instituto Superior de Psicologia Aplicada (ISPA), February 2025, Portugal (*Invited*).
- Roundtable Chair at 2nd Oncological Urology Conference – Present and Future, Hospital CUF Tejo, January 2025, Portugal (*Invited*).
- Global Hybrid Summit 2024 – Real World Evidence for the Real World, November 2024, Portugal (*Invited*).
- Speaker at the Meeting USP/NOVA on Artificial Intelligence, Health and Precision Medicine, June 2024, São Paulo, Brazil (*Invited*).
- Speaker at the Leading with AI: Exploring Business and Technology Frontiers – Harvard Business School and Nova SBE, April 2024, Portugal (*Invited*).
- Speaker at the 19th European Molecular Imaging Meeting, March 2024, Portugal (*Invited*).
- Health Innovation - From Ideas to Impact: How Health Professionals, Patients and Carers Contribute to Technological Advances in Health, NOVA Medical School and NOVA School of Business and Economics, September 2023, Portugal (*Invited*).
- Keynote Speaker at the Liga Portuguesa contra o Cancro, September 2023, Portugal (*Invited*).
- Speaker at the Sustainable Value Creation Summit (SVCS) “How to Create Value using basic/fundamental science”, Nova SBE, May 2023, Portugal (*Invited*).
- Roundtable titled mRNA: The next revolution, Science|Business and Moderna, April 2023, Brussels, Belgium (*Invited*).
- Nanomedicine Seminar Series – “Working on the landscape of Precision Nanomedicine in Oncology” – Houston Methodist Research Institute, Houston Methodist Hospital, March 2023, Houston, USA (*Invited*).

- VIII Semana da Bioengenharia – Keynote Speaker – “It’s nano or never: The importance of nanotechnologies in the healthcare future”, Instituto Superior Técnico (IST), March 2023, Portugal (*Invited*).
- ITQB PhD Program 2022 - MolBioS Doctoral Program: Nanoprocess for Life Science, March 2022, Portugal (*Invited*).
- “Application of multifunctional nano-and-biomaterials for cancer therapy and diagnosis” - Master Program in Biopharmaceutical Sciences, Oncobiology, FFUL, February 2022, Portugal (*Invited*).
- BioMedicine and BioSciences Seminar Series - University of Bergen (UiB), February 2022, Norway (*Invited*).
- Roundtable Chair on careers in the biomedical sciences, The Non-Conformist Scientist and the National Association of Biomedical Engineering Students, January 2022, Boston (*Invited*).
- “TIPS for applying to CEEC 5th edition 2022?” - Lyris, Advanced Science Education, January 2022 (*Invited*).
- Biotech in Action S2: Water Cooler Talk - Massachusetts Institute of Technology (MIT), Harvard–MIT Division for Health Sciences and Technology, July 2021, Boston, Massachusetts, USA (*Invited*).
- “The story behind my path in Cancer NanoMedicine” at the PostDoc ShowCase 2nd edition - Department of Pharmacy, University of Naples Federico II, June 2021, Italy (*Invited*).
- 9th Session IST- MedNetworking – To see or not to see: How Nanotechnology is redefining Medicine, Instituto Superior Técnico (IST), May 2021, Portugal (*Invited*).
- JorTec 2021 - Jornadas Tecnológicas (JorTec) da Faculdade de Ciências e Tecnologia, February 2021, Portugal (*Invited*).
- Keynote Speaker - 13^o Encontro Nacional de Química Orgânica/6^o Encontro Nacional de Química Terapêutica (13ENQO/6ENQT), January 2020, Portugal (*Invited*).
- Seminar, March 2017, University of Glasgow, Institute of Molecular Cell and Systems Biology, Glasgow, Scotland (*Invited*).
- Nanomedicine Seminars, February 2017, Trinity College Dublin, School of Medicine, Dublin, Ireland (*Invited*).
- 10th World Biomaterials Congress, May 2016, Montreal, Canada.
- 11th Annual Broad Retreat - Broad Institute of MIT and Harvard, December 2015, Boston, Massachusetts, USA.
- Society for Biomaterials 2015, April 2015, North Carolina, USA.
- 4th International Conference on Multifunctional, Hybrid and Nanomaterials, March 2015, Barcelona, Spain.
- 8th International Conference of Coelenterate Biology, December 2013, North Beach, Eilat, Israel.
- Collaborative Congress of the European Society for Gene and Cell Therapy and the Spanish Society for Gene and Cell Therapy, October 2013, Madrid, Spain.
- International Conference on Materials for Advanced Technologies 2013. Symposium R: Ecological and Health Impact of Nanomaterials and Nanotechnology, July 2013, Singapore.
- European Conference of Human Genetics 2013, June 2013, Paris, France.
- E-MRS 2013 SPRING MEETING, Bionanomaterials for imaging, sensing and actuating, May 2013, Strasbourg, France.
- Elsevier 3rd International Conference on Multifunctional, Hybrid and Nanomaterials (Hybrid Materials 2013), March 2013, Sorrento, Italy.
- Materials Research Society Fall Meeting, November 2012, Boston, Massachusetts, USA.

- NanoMed2012, International Conference on Nanotechnology in Medicine, November 2012, University College London, London, UK.
- American Chemical Society Spring 2012 National Meeting, March 2012, San Diego, California, USA.
- Miami 2012 Winter Symposium: Nanotechnology in Biomedicine, February 2012, Miami, USA.
- SPIE West 2012, San Francisco, USA.
- SPIE West 2011, Colloidal Quantum Dots/Nanocrystals for Biomedical Applications VI, February 2011, San Francisco, USA.
- TNT2010 – Trends in Nanotechnology, September 2010, Braga, Portugal.
- National Congress MicroBiotec'09, 2009, Vilamoura, Portugal.
- EURONANOFORUM 2009. Nanotechnology for Sustainable Economy. European and International Forum on Nanotechnology, June 2009, Prague, Czech Republic.
- XXXIV Genetic Journeys - Human Cancer Genetics and Genotoxicity, Portuguese Society of Human Genetics, 2009, Lisbon, Portugal.

COMMUNITY OUTREACH

- Dec 2025 – **Expresso** article: “O cientista na era do assistente incansável: quando a IA força a redesenhar a carreira científica”. <https://expresso.pt/opiniao/2025-12-08-o-cientista-na-era-do-assistente-incansavel-quando-a-ia-forca-a-redesenhar-a-carreira-cientifica-ea20762d>
- Oct 2025 – **Observador** article: “Outubro rosa, um apelo claro a todos nós: celebrar quem partiu, cuidar de quem fica”. <https://observador.pt/opiniao/outubro-rosa-um-apelo-claro-a-todos-nos-celebrar-quem-partiu-cuidar-de-quem-fica/>
- Sep 2025 – **Expresso** article: “Plano Marshall para a Ciência: como Portugal pode construir em 5 anos o que andou 25 a adiar”. <https://expresso.pt/opiniao/2025-09-17-plano-marshall-para-a-ciencia-como-portugal-pode-construir-em-5-anos-o-que-andou-25-a-adiar-9d65b713>
- Aug 2025 – **Público** article: “O paradoxo da extinção da FCT que nos dá mais reforma do Estado e menos ciência”. <https://www.publico.pt/2025/08/21/ciencia/opiniao/paradoxo-extincao-fct-reforma-estado-menos-ciencia-2143832>
- Jul 2025 – **Expresso** article: “Cativações recorde e dívidas malparadas: como a FCT se tornou o travão invisível da investigação”. <https://expresso.pt/opiniao/2025-07-29-cativacoes-recorde-e-dividas-malparadas-como-a-fct-se-tornou-o-travao-invisivel-da-investigacao-8b2b576c>
- Jun 2025 – **Público** article: “Entre bolsas e promessas, a reforma que falta à Ciência em Portugal”. <https://www.publico.pt/2025/06/21/ciencia/opiniao/bolsas-promessas-reforma-falta-ciencia-portugal-2136865>
- Jun 2025 – **Sábado** article: “Cancro: Os novos avanços da medicina”. <https://www.sabado.pt/ciencia---saude/detalhe/cancro-os-novos-avancos-da-medicina>
- May 2025 – **Expresso** article: “Pode a ciência transformar Portugal sem indústria? E pode a indústria fazer Portugal evoluir sem investigação?”. <https://expresso.pt/opiniao/2025-05-21-pode-a-ciencia-transformar-portugal-sem-industria--e-pode-a-industria-fazer-portugal-evoluir-sem-investigacao--e017d857>

- Apr 2025 – **Publico** article: “NOVA Medical School recebe 3,25 milhões para criar ecossistema colaborativo”. <https://www.publico.pt/2025/04/16/estudiop/noticia/nova-medical-school-recebe-325-milhoes-criar-ecossistema-colaborativo-2129835>
- Mar 2025 – **Expresso** article: “Medicina 4.0 – como a inteligência artificial está a revolucionar a formação dos médicos do futuro”. <https://expresso.pt/opiniao/2025-03-20-medicina-4.0-como-a-inteligencia-artificial-esta-a-revolucionar-a-formacao-dos-medicos-do-futuro-ee25a44c>
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