

Curriculum Vitae

PERSONAL INFORMATION

Given name: Nicola

Family name: Crosetto

Date of birth: January 2, 1978

Nationality: Italian

Phone: +46 (0)73 986 53 79

E-mail: nicola.crosetto@scilifelab.se | Lab website: <http://bienkocrosettolabs.org>

DEGREES

2018-10-06 Italian National Scientific Habilitation (ASN2018, settore 06/N1, I Fascia)

2011-02-11 PhD, University of Pavia (Italy) and Goethe University (Germany)

2007-12-18 Specialization in Medical Oncology (70/70), University of Torino (Italy)

2003-09-18 MD (110/110 *cum laude*), University of Pavia (Italy)

APPOINTMENTS

2020-present Scientific Consultant, Candiolo Cancer Institute, Turin (Italy)

Feb-Apr 2020 Visiting Professor, Candiolo Cancer Institute, Turin (Italy)

2015-present Assistant Professor (Forskarassistent), Karolinska Institutet

2013-2014 Postdoctoral Associate, van Oudenaarden Lab, Hubrecht Institute (The Netherlands)

2011-2013 Postdoctoral Associate, van Oudenaarden Lab, MIT (USA)

2008-2010 PhD student, Dikic Lab, Goethe University (Germany)

2004-2007 Resident Physician, University of Torino (Italy)

1997-2003 MD student, University of Pavia (Italy)

SUPERVISION OF STUDENTS AND POSTDOCS (as group leader)

2020-present PhD co-supervisor, Gabriel da Cunha Longo, IBM Mainz (Germany)

2020-present PhD co-supervisor, Yajing Zhu, Karolinska Institutet

2019-present PhD main supervisor, Luuk Harbers, Karolinska Institutet

2019-2021 Postdoctoral advisor, Dr Ning Zhang, Karolinska Institutet

2018-present Scientific advisor, Dr Niklas Schultz, Karolinska Institutet

2018-present Postdoctoral advisor, Dr Federico Agostini, Karolinska Institutet

2018-2019 Scientific advisor, Dr Firas Tarish, Södersjukhuset, Stockholm

2018-2019 Postdoctoral advisor, Dr Marcin Nicos, Karolinska Institutet

2018-present PhD main supervisor, Roberto Ballarino, Karolinska Institutet

2017-present Postdoctoral co-supervisor, Dr Erik Wernersson, Karolinska Institutet

2017-present PhD main supervisor, Michele Simonetti, Karolinska Institutet

2016-present Postdoctoral advisor, Dr Britta Bouwman, Karolinska Institutet

2016-present PhD co-supervisor, Jing Lyu, Karolinska Institutet

2015-2020 Postdoctoral advisor, Dr Silvano Garnerone, Karolinska Institutet

2015-2019 Postdoctoral advisor, Dr Xiaolu Zhang, Karolinska Institutet

2015-2019 PhD main supervisor, Reza Mirzazadeh, Karolinska Institutet

2015-2017 PhD co-supervisor, Nataliia Gralievskaya, IBM Mainz (Germany)

In addition, I have supervised 4 master students from Sweden and 15 Erasmus students from Italy, Germany, Poland, France, and Austria. Furthermore, I have trained >30 students and postdocs from all over the world, who came to my lab to learn our methods (www.breakome.eu; www.hdfish.eu; www.fusefish.eu; www.tumorheterogeneity.eu).

ONGOING COLLABORATIONS

- Prof Andrea Sottoriva, Human Technopole, Milan, Italy (tumor evolution)
- Dr Chiara Ambrogio, Molecular Biotechnologies Center, Turin, Italy (metastasis drivers)
- Assoc Prof Theodoros Foukakis, Karolinska University Hospital (breast cancer genomics)

- Profs Anna Sapino and Caterina Marchiò IRCC Candiolo, Turin, Italy (breast cancer genomics)

PATENTS

2015 “DNA Double-strand Breaks Labeling In Situ and Sequencing (BLISS) by Solid-phase Barcoding and Selective Amplification: Methods and Application”, amendment to US Patent Application 62/094,093 (co-applicant with prof Feng Zhang, MIT)

AWARDS

2009 Young researcher award, “C. Golgi” Foundation (Italy)
2006 Young researcher award, “G. Costa” Association against cancer (Italy)
2005 Short-term Research Grant Award (25,000 EUR), Collegio Ghislieri (Italy)
2004 Best medical graduate award, Collegio Ghislieri, University of Pavia (Italy)

TALKS (as Principal Investigator)

Jun 2021 Monday Seminar Series at ICMR, Zurich, Switzerland (invited)
May 2021 Webinar on SARS-CoV-2 genomic surveillance by COVseq for CELLINK (invited)
Dec 2020 CELLINK Partnership Virtual Conference (Invited)
Aug 2020 ‘Science talks’ SciLifeLab virtual research symposium, Stockholm (invited)
Jul 2020 Oncology Unit, ‘S. Croce’ General Hospital, Cuneo, Italy (invited)
Jun 2020 Webinar on iFISH for Twist Bioscience (invited)
May 2020 Applications of In Situ Hybridization in Research and Disease, Cambridge, UK (invited)
Sep 2019 European Congress of Pathology, Nice, France (invited)
Jun 2019 Nencki Institute for Neurobiology, Warsaw, Poland (invited)
May 2019 Frankfurt Cancer Institute, Frankfurt, Germany (invited)
Jan 2019 Prof Ola Soderberg group, Uppsala University (invited)
Nov 2018 Jagiellonian University, Krakow, Poland (invited)
Jun 2018 OEI Oncology Days 2018, Poznan, Poland (invited)
May 2018 GAP Conference 2018, Karolinska Institutet (selected)
Mar 2018 Advanced Seminars in Tumor and Cell Biology, Karolinska Institutet (invited)
Dec 2017 IRCC Candiolo, Turin, Italy (invited)
Dec 2017 Clinical Genetics Friday Talks, Karolinska Institutet (invited)
Nov 2017 Oncology-Pathology Friday Talks, Karolinska Institutet (invited)
Oct 2017 DNA repair Mini-Symposium, Karolinska Institutet (invited)
Oct 2017 Bertinoro Computational Biology Meeting, Bertinoro, Italy (invited)
Sep 2017 KI-StratCan Cancer Retreat 2017, Djurönäset (Stockholm), Sweden (selected)
Sep 2017 European Congress of Pathology, Amsterdam, The Netherlands (invited)
Jun 2017 SciLifeLab Fellows retreat, Djurönäset, Sweden (invited)
Dec 2016 Frontiers in Translational Medicine course, Karolinska Institutet (invited)
Oct 2016 Seminars in Biochemistry, Stockholm University (invited)
Oct 2016 Biomedicum Symposium for PhD students and Postdocs, Karolinska Institutet (invited)
Oct 2016 The Cell Cycle course, Karolinska Institutet (co-organizer)
Jun 2016 Prof Rolf Lewensohn group, Oncology-Pathology, Karolinska Institutet (invited)
May 2016 Genome Instability and Human Disease course, Institut Curie, France (invited)
May 2016 Genome Engineering 4.0 workshop, Broad Institute, USA (invited)
Apr 2016 Prostate Cancer Group (prof Steven Bova group), Tampere University, Finland (invited)
Feb 2016 Frontiers in Cancer Research and Therapy symposium, Karolinska Institutet (invited)
Nov 2015 The Cell Cycle course, Karolinska Institutet (invited)
Nov 2015 IMB, Mainz, Germany (invited)
Sep 2015 11th World Urological Research Congress, Nijmegen, The Netherlands (invited)
Sep 2015 Emerging Methods and Technologies conference, Karolinska Institutet (selected)
Jun 2015 WITE Conference 2015, Würzburg, Germany (invited)
Jun 2015 MTC lunch seminars, Karolinska Institutet (invited)
May 2015 DNA Sequencing and Basic Bioinformatics course, Karolinska Institutet (invited)
May 2015 IFOM-IEO seminars, Milan, Italy (invited)
Apr 2015 GAP Conference 2015, MD Anderson Cancer Center (selected)

Feb 2015 MBB lunch seminars, Karolinska Institutet (invited)

COURSES

May 2019 ‘The Era of “-Seq” Methods. Principles and applications’, Krakow, Poland (organizer)
 Nov 2018 ‘Next-generation FISH technologies: from theory to practice’, Krakow, Poland (organizer)
 Mar 2017 EMBO Lab Management Course Leadership, Uppsala, Sweden (attendee)
 Fall 2016 Pedagogy Course for Doctoral Supervisors, Karolinska Institutet (attendee)
 2015-present Biochemistry for medical students, MBB, Karolinska Institutet (teacher)

POSITIONS OF TRUST

May 2021 Reviewer, Israel Science Foundation (ISF), Israel
 Oct 2020 Reviewer, Croatian Science Foundation (HRZZ), Croatia
 Jun 2020 Reviewer, French National Research Agency (ANR), France
 May 2020 Reviewer, Wellcome Trust, UK
 Jan 2020 Reviewer, EASI-Genomics Consortium
 Jan 2020 Committee member, PhD half-time review Jing Lyu, MBB, Karolinska Institutet
 Jun 2019 Committee member, PhD half-time review Alba Corman, MBB, Karolinska Institutet
 2018-2019 Associate Editor, *BMC Genomics*
 2018 Reviewer, *Swiss National Science Foundation*
 2018 Reviewer, *European Research Area Network*
 Jun 2017 Committee member, PhD half-time review Benedekt Bokozy, MTC, Karolinska Institutet
 Jan 2017 Chairman, PhD thesis defense Alan Shaw, MBB, Karolinska Institutet
 Jun 2016 Examiner, Junior Research Projects, Master in Biomedicine, Karolinska Institutet
 2016-present PhD Admission Committee, MBB, Karolinska Institutet
 2015-2017 Executive Committee, Division of Translational Medicine, MBB, Karolinska Institutet
 2015-present Member, *Personalized Cancer Medicine* (PCM) program, Karolinska Institutet
 2015 Reviewer, *European Research Area Network*
 2014-present Reviewer, *Science*, *Nature Biotechnology*, *Nature Communications*, *Nature Protocols*, *Nucleic Acids Research*, *Genome Research*, *Oncotarget*, *BMC Genomics*, *JoVE*, *Proceedings of the IEEE*, *PLoS One*, *FEBS J*, *Scientific Reports*, *Analytical Chemistry*, *NPJ Breast Cancer*, *Genomics*, *PLoS Biology*

CURRENT RESEARCH GRANTS (as Principal Investigator)

2017-2022 Swedish Foundation for Strategic Research (SSF)
 Project title: “Integrated visualization of intra-tumor heterogeneity”
 Sum: 33,000,000 SEK (~3,155,000 EUR)
 2017-2021 Ragnar Söderberg Fellows in Medicine 2016
 Project title: “High-dimensional anatomy of intra-tumor heterogeneity”
 Sum: 8,000,000 SEK (~765,000 EUR)
 2018-2021 KID2016 (Karolinska Institutet)
 Project title: “Molecular characterization of activity-induced DNA double-strand breaks in neurons”
 Sum: 1,200,000 SEK (~114,000 EUR)
 2018-2022 Karolinska Institutet Strategic Research Programme in Cancer (StratCan)
 Senior Researcher in Cancer Research
 Project title: “Illuminating cancer genomic fragility by integrated omics”
 Sum: 7,500,000 SEK (~717,000 EUR)
 2019-2022 Swedish Research Council (VR)
 Project title: “Deciphering the role of programmed DNA breaks in aging”
 Sum: 7,200,000 SEK (~688,000 EUR)
 2019-2021 Swedish Cancer Society (Cancerfonden)
 Project title: “Charting the Cancer Breakome and its Clinical Implications”
 Sum: 2,400,000 SEK (~229,000 EUR)
 2020-2021 SciLifeLab Open call for COVID-19-related proposals
 Project title: “COVseq – Developing COVseq for mass-scale SARS-CoV-2 sequencing”

- 2021 Sum: 500,000 KSEK (~50,000 EUR)
Cancer Research KI (former StratCan)
Translational Seed Funding Grant 2020
Project title: "Assessing the analytical and clinical validity of DNA copy number profiling in breast cancer samples by the CUTseq method"
Sum: 750,000 SEK (~72,000 EUR)
- 2021-2026 Karolinska Institutet
Consolidator Grant 2020
Sum: 6,000,000 SEK (~600,000 EUR)

COMPLETED RESEARCH GRANTS (as Principal Investigator)

- 2015-2018 Karolinska Institutet, Strategic recruitment of junior group leaders (Forskarassistent)
Sum: 4,000,000 SEK (~382,000 EUR)
- 2015-2018 Swedish Research Council (VR), Project title: "Advancing personalized oncology with quantitative single-cell technologies to measure tumor heterogeneity"
Sum: 6,000,000 SEK (~574,000 EUR)
- 2016-2018 Swedish Cancer Society (Cancerfonden), Project title: "Unraveling the clinical impact of intra-tumor heterogeneity by multi-regional omics and single-cell technologies"
Sum: 1,800,000 SEK (~172,000 EUR)
- 2019-2020 Karolinska Institutet
2-year extension of current position as Assistant Professor (Forskarassistent)
Sum: 2,000,000 SEK (~191,000 EUR)
- 2020 Donation for COVID-19 research by the Swedish pharma company, Chiesi AB
Project title: COVseq – Developing COVseq for mass-scale SARS-CoV-2 sequencing
Sum: 320,000 KSEK (~32,000 EUR)
- 2020 Donation for COVID-19 research by the Swedish company, Tetra Pak AB
Project title: COVseq – Developing COVseq for mass-scale SARS-CoV-2 sequencing
Sum: 344,000 KSEK (~34,000 EUR)

Candiolo (TO), 18-10-2021

