

KHALIL HELOU (CV)

Date of birth: 6th January 1966

Department of Oncology

Institute of Clinical Sciences,

University of Gothenburg

SE 413 45 Gothenburg, Sweden,

Phone (+46) 722 999 444,

Email: khalil.helou@oncology.gu.se

Work address: Sahlgrenska Center for Cancer Research

Medicinaregatan 1G, 6th floor

413 90 Gothenburg, Sweden

WORK EXPERIENCE

2023-present	<i>Vice Prefect for PhD studies</i> , Institute of Clinical Sciences, University of Gothenburg
2019-present	<i>Join Director of PhD studies</i> , Sahlgrenska Academy, University of Gothenburg
2019-present	<i>Laboratory manager</i> , Department of Oncology, University of Gothenburg
2003-present	<i>Researcher (100%)</i> , Department of Oncology, University of Gothenburg
1995-2000	<i>PhD student/Research assistant</i> , Department of Genetics, University of Gothenburg: <ul style="list-style-type: none"> • Conducted teaching totaling approximately 1,500 hours including planning, preparation, and instruction. • Taught undergraduate (A- and B-level) courses in <i>Basic Genetics and Molecular Genetics</i>. • Taught advanced (C and D-level) laboratory courses in <i>Gene Technology, Advanced Genetics and Human Genetics</i>.

EDUCATION

2025-present	<i>Professor in Experimental Oncology</i> , University of Gothenburg, Sweden
2005-2025	<i>Associate Professor in Experimental Oncology</i> , University of Gothenburg, Sweden
2002	<i>Postdoctoral Fellow</i> , Genetics Branch, Center for Cancer Research, National Cancer Institute/NIH5, Bethesda, USA
2001	<i>Postdoctoral Fellow</i> , Department of Cell and Molecular Biology-Genetics, University of Gothenburg, Sweden
2000	PhD Genetics, University of Gothenburg, Sweden Dissertation: <i>"Genetic alterations in experimental tumours with special reference to Hgfr/Met oncogene amplification"</i> (supervisor: Prof. Göran Levan)
1999	<i>Licentiate of Philosophy (PhLic) in Genetics</i> , University of Gothenburg, Sweden (supervisor: Prof. Göran Levan, co-supervisor: Dr. Fredrik Ståhl)
1995	<i>MSc in Genetics</i> , University of Gothenburg, Sweden (supervisor: Dr. Fredrik Ståhl)

SCIENTIFIC ADVISORY FUNCTIONS

- **Expert advisor** for the employment of Johan Vallon Christersson as Research Assistant in Functional Cancer Genomics, Lund University
- **Expert advisor** for the associate professorship in experimental oncology for Charlotte Welinder, Lund University
- **Examination board member** for more than 23 doctoral dissertations (last 10 years)
- **Reviewer of national and international grant applications:**
 - Research Board of the Radiumhemmet Research Foundation, Stockholm, Sweden
 - Committee Member of the steering group, Lions Cancer Foundation
 - Committee Member, Landénska Research Scholarship Assessment (Appointed by the Medical Program)
 - Reviewer for the Czech Science Foundation
 - Reviewer for the *Breast Cancer Now* (the UK's largest breast cancer charity)
- **Opponent for** PhD dissertation by Naveen Ravi, Department of Laboratory Medicine, Lund Division of Clinical Genetics, Faculty of Medicine, Lund University, Lund, Sweden (28th of November 2019)

HONORS AND AWARDS

- **Eva Selin-grant** as cancer researcher (2013)
- **Swedish Cancer Society (Cancerfonden) postdoctoral fellow** (2001-2003)
- **Sven and Lilly Lawski graduate fellow in Genetics** (1995-1997)

INVOLVEMENT IN SCIENTIFIC JOURNALS

- Editorial board member of the BMC Cancer
- Editorial board member of the Biomedicines
- Reviewer for a numerous scientific journal

POSITIONS OF TRUST

- **1996-1997:** Member of the CMB Departmental Board, PhD student representative
- **2019-present:** Vice Chair of the Council for PhD Courses, Sahlgrenska Academy
- **2020-present:** Chair of the Council for PhD Education, Institute of Clinical Sciences
- **2023-present:** Chair of the Council for Research Education, Institute of Clinical Sciences
- **2024-present:** Member of the Council for Research Ethics (FER), Sahlgrenska Academy
- **2024-present:** Member of the Council for the Review of Deviations from Good Research Practice, University of Gothenburg

TEACHING EXPERIENCE

Mars 13-21, 2001: Instructor, PhD course on “*Advanced in situ Hybridization, Comparative Genome Hybridization, Fluorescence In Situ Hybridization & Live Imaging*”, Department of Cell and Molecular Biology, University of Gothenburg, Sweden

Human Genetics (2001-2008) Invited speaker, Department of Cell and Molecular Biology, University of Gothenburg, Sweden

Radiation Biology (2010-2024) Invited speaker, Department of Medical Radiation Sciences, University of Gothenburg

PhD course (2018): Instructor and Examiner, *“Winding your way through the genome, transcriptome, proteome of human diseases”* Sahlgrenska Academy, University of Gothenburg

Academic Writing, PhD course (2020-2024): Speaker and examiner Sahlgrenska Academy, University of Gothenburg

Introduction to Research, Mandatory PhD course (2019-present): Invited speaker, Sahlgrenska Academy, University of Gothenburg

Clinical Research School, (2022-present): Invited speaker, Sahlgrenska Academy, University of Gothenburg

Research Ethics, PhD course (2022-present): Invited speaker, Sahlgrenska Academy, University of Gothenburg

SUPERVISION

Former PhD Students under My Supervision (through to their defense)

- **Elin Karlsson:** *Novel biomarkers predicting long-term survival in breast cancer*, 2009
- **Szilárd Nemes:** *Integrative genomic and survival analysis of breast tumors*, 2012
- **Emman Shubbar:** *Analysis of Novel Biomarkers for Unfavorable Breast Cancer Prognosis*, 2012
- **Toshima Parris:** *High-risk breast cancer. From biology to personalized therapeutic strategies*, 2014
- **Jana Biermann:** *Tumour evolution and novel biomarkers in breast cancer*, 2019
- **Hanna Engqvist:** *Novel biomarkers associated with histotype and clinical outcome in early-stage ovarian carcinoma*, 2020

Former PhD students under My Co-Supervision (through to their defense)

- **Anna Danielsson:** Intrinsic radiosensitivity and molecular targets for tumour radiosensitization of head and neck cancer. With special reference to chromosomal instability and pentoxifylline, 2005
- **Tatjana Adamovic:** Identification and Characterization of Cancer Genes in Hormone-Dependant Tumors: Molecular Genetic Analysis in Rat Models of Endometrial and Mammary Cancer, 2006
- **Ahmad Hamta:** The BDII Rat Model of Endometrial Cancer: Molecular Analysis of Genetic and Cytogenetic Aberrations, 2006
- **Emil Schuler:** Biomarker discovery and assessment for prediction of kidney response after 177Lu-octreotate therapy, 2015
- **Nils Rudqvist:** Radiobiological effects of the thyroid gland - transcriptomic and proteomic responses to 131I and 211At exposure, 2015
- **Britta Langen:** Systemic effects after ionizing radiation exposure: Genome-wide transcriptional analysis of mouse normal tissues exposed to 211At, 131I, or 4 MV photon beam, 2015
- **Johan Spetz:** Lutetium-177-octreotate treatment of small intestine neuroendocrine tumors - Radiation biology as basis for optimization, 2017
- **Viktor Sandbloms:** Strategies for optimisation of 177Lu-octreotate therapy – exploring local administration and combination therapy regimens, 2019
- **Malin Larsson:** Long-term radiobiological effects of 131I exposure - dose, age and time related transcriptomic and proteomic response in rats, 2021
- **Jenny Nyqvist:** Multiple primary malignancies in breast cancer patients. From population study to genetics, 2021
- **Charlotte Andersson:** Optimisation of radionuclide therapy by reduction of normal tissue damage, 2022

- **Axel Stenmark Tullberg:** The use of immunological biomarkers to improve individualization of postoperative radiotherapy in breast cancer, 2022
- **Arman Romiani:** Improved radionuclide therapy of neuroblastoma Preclinical evaluation of ¹⁷⁷Lu-labeled somatostatin analogs, 2023
- **Peter Larsson:** The proteasome as a target for cancer therapy, 2023
- **Mikael Elvborn:** Improvement of ¹⁷⁷Lu-octreotate treatment of small-intestine neuroendocrine tumors by hyperfractionation, 2023

Current PhD students under my supervision

- **Lucas Werner, MS**
- **Hugo Swensson, MS**
- **Luay Aziz, MD, MB ChB**
- **Elisabeth Werner Rönnerman, MD** (Planned September 2026)
- **Ella Ittner**

Current PhD students under my co-supervision

- **Anna Fäldt Beding**
- **Amalia Landén**
- **Ingun Ståhl**
- **Hana Bakr**
- **Klara Esbo**
- **Julia Johansson**
- **Amy Hardy Jiménez**

Former postdocs under my supervision

- **Irina Corin, 2005**
- **Anna Danielsson, 2007**
- **Toshima Parris, (2016-2017)**

HIGHER EDUCATIONAL PEDAGOGICAL TRAINING

Scientific Supervisor Training, University of Gothenburg (Equivalent to PIL 201) 2004

Introductory Course in Higher Education Pedagogy, University of Gothenburg (Equivalent to PIL 101) 2004

Conflict Management, University of Gothenburg (one-week course) 2006

Higher Educational Pedagogy 2 (PIL 102), University of Gothenburg 2024

Higher Educational Pedagogy 3 (PIL 103), University of Gothenburg 2025

PUBLICATIONS

130 Peer reviewed original articles

6 manuscripts (2 under review)

Publication metrics (Google Scholar)

Citations 3930

h-index 35

i10-index 96

GRANTS

Khalil Helou as Main Applicant (2022-present)

1. "Novel prognostic and predictive biomarkers for ovarian cancer treatment decisions" Jk Cancer Research Foundation (2023-2024) 1600000

2. "Prognostiska biomarkörer som nya behandlingsredskap mot aggressiv äggstockscancer" ALF-projektmedel (2022-2024) 1300000
3. "Novel prognostic and predictive biomarkers for ovarian cancer treatment decisions" Project-linked doctoral project Sahlgrenska Academy 2023-2026) 2417000
4. "Clinical significance of the Lemur Tyrosine Kinase 3 as a potential target for ovarian cancer treatment" Swedish Cancer Society (2024-2026) 3000000
5. "Clinical significance of the Lemur Tyrosine Kinase 3 as a potential target for ovarian cancer treatment" ALF projektmedel (2025-2027) 1200000

Khalil Helou as Co-Applicant

1. "Utveckling och utvärdering av nya metoder för bättre molekylär avbildning och behandling av patienter med neuroendokrina tumörer med radioaktiva läkemedel"
 - **Principal Investigator:** Eva Forssell-Aronsson
 - **Funding Body:** ALF Projektmedel (ALFGBG-1005656)
 - **Grant Period:** 2025–2027
 - **Amount:** 3,750,000 SEK
2. "Molekylär radionuklidterapi (MRNT) av endokrina tumörer och bröstcancer: Nya behandlingsstrategier"
 - **Principal Investigator:** Eva Forssell-Aronsson
 - **Funding Body:** ALF Projektmedel (ALFGBG-966074)
 - **Grant Period:** 2022–2024
 - **Amount:** 3,750,000 SEK
3. "Impact of age and comorbidity on postoperative treatment decisions and survival for patients with triple-negative breast cancer: A Swedish nationwide registry-based study"
 - **Principal Investigator:** Jenny Nyqvist-Streng
 - **Funding Body:** FoU-Beredningsgruppen vid Skaraborgs Sjukhus (VGSKAS-1001966)
 - **Grant Period:** 2024
 - **Amount:** 150,000
4. "Molekylär radionuklidterapi (MRNT) av neuroendokrina tumörer och bröstcancer: Nya behandlingsstrategier"
 - **Principal Investigator:** Eva Forssell-Aronsson
 - **Funding Body:** Vetenskapsrådet
 - **Grant Period:** 2022–2024
 - **Amount:** 4,800,000 SEK