



Hassan Roudgari

▲ Addresses:

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Summary

Degrees: MD, PhD

Experiences: 15 years of clinical practice, 12 years of research experience mainly in the field of cancer genetics and risk assessment and producing estimation models, 3 years of teaching experiences, 10 years of medical administration experiences, 6 years of managing and advisory experiences in different fields including medical products and other services, co-founder of a cohort (another one being prepared), co-founder of a medical journal.

Publications: first author of 4 papers (plus 3 being prepared), 2 posters, PhD thesis and MD thesis.

Skills: genetic counselling, team-based researching, medical and clinical knowledge, medical teaching, expert in SPSS, ROC curve, Office applications including Access and Excel, Reference Manager, administration and managing.

Personal skills: fast- and self-learner, hardworking, initiator, creative, independent, sociable, friendly, loyal, excellent team player, art lover and photographer etc.

Highlights: Together with the technical creator of COS risk assessment software, we introduced and evaluated this model to be used in clinical guidelines for familial breast/ovarian cancer families. I also developed a method for replacing missing data in the pedigrees with logic and fact-based extrapolations that can be used in cancer genetic clinics or researches. I developed a prostate cancer risk assessment model (PCRAM) together with my colleagues in German cancer research centre (DKFZ). I also helped Scottish Intercollegiate Guidelines Network (SIGN), Producer of BOADICEA in Cambridge University and National Institute for Health & Care Excellence (NICE) to evaluate their methods of risk estimation for hereditary breast and ovarian cancer. I have a long experiences of managing in the fields of medical services and medical/research administration. I am the main founder of Journal of Iran's Medical Council.

Education & Qualifications

- ▲ **Clinical attachment in general Genetics (2006 – 2008):** As a part of my clinical training, attended University clinics for general and cancer genetics under supervision of Professor Neva Haites and Dr Zosia Miedzybrodzka and other consultants, Clinical Genetics Service, Argyle House, NHS Scotland, Aberdeen, UK.
- ▲ **Clinical attachment in Cancer Genetics (2002 – 2006):** Attended Cancer Genetics Clinic under supervision of Professor Neva Haites, Clinical Genetics Service, NHS Scotland, Aberdeen.
- ▲ **PhD in Medical Genetics (2007):** My thesis was: Application of Risk Assessment Models for Familial Cancer. During my PhD course I was:
- **Co-operating on validation of BOADICEA risk/probability assessment model at University of Cambridge (2004 – 2007):** with Cancer Research UK Genetic Epidemiology Research Group, Strangeways Research Laboratory, University of Cambridge (antonis@srl.cam.ac.uk)
- **Taking part in a European International project (2002 – 2005):** As one of the UK representative in COS international European project (A Case-Only Study on breast cancer funded by EU, group leader: Franco.Berrino@istitutotumori.mi.it). Many well-known European cancer institutes took part in this study including *Istituto Tumori* from Italy and *German Cancer Research Centre (DKFZ)* from Germany.
- ▲ **Doctor in Medicine (MD; 1985 – 1992):** 7-year medical course and clinical training at Mashad University of Medical Sciences, Mashad, Iran. MD thesis in the field of dermatology on “Association between Vitiligo and Alopecia Areata: Probable causes & case report” (scored 20/20).
- ▲ **Diploma in experimental sciences (1981 – 1985):** Imam Academy, Amol, Iran

Medical, Academic & Clinical Professional Experiences

- ▲ **Researcher and member of staff (June 2007 – present):** Research assistant and then honorary research fellow at Aberdeen University, UK (Part-time or Honorary since 2009). Also I was carrying out a collaborative study with University of Manchester on cancer risk estimation regarding its use in clinical settings.
- ▲ **Assistant Professor in Genetics (2018 - present):** Genomics centre, Medical School, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- ▲ **Co-Founder and member of executive board of a Nationwide Cohort on Genetics of Orofacial Pain and Temporomandibular Disorders (TMD) (2018 – present):** We designed a cohort study to study the role of genetic predispositions in causation of TMD and pain phenomenon. This project received a grant from Ministry of Health, Treatment and Medical Education of Iran.
- ▲ **Co-Founder and Executive manager and Associate Editor of Journal of Iranian Medical Council (2018 – present):** I established Journal of Iranian Medical Council (www.jimc.ir) in 2017 and published the first issue in 2018.
- ▲ **University Clinic for Genetic disorders (2018 – present):** Running a Genetics Clinic for fertility, prenatal and familial cancers at Shiraz University of Medical Science, Iran

- ▲ **Present):** I established Journal of Iranian Medical Council (www.jimc.ir) in 2017 and published the first issue in 2018.
- ▲ **Private Clinic for Genetic Counselling (Jan 2010 – 2018):** Running a private clinic and in private genetic centres where have been visiting all types of genetic cases, focusing on familial cancers. Also running a specialized genetics clinic together with Paediatric orthopaedists for Musculo-Skeletal disorders in Tehran.
- ▲ **Researcher at German Cancer Research Centre (DKFZ) (2010 – 2011):** I worked with Professor Kari Hemminki, the head of department of molecular genetic epidemiology at DKFZ and successfully produced a clinical model for Hereditary Prostate Cancer Risk Assessment. DKFZ, Heidelberg University, Heidelberg, Germany.
- ▲ **Assistant Professor in Genetics (Dec 2009 – 2010):** Lecturing and teaching at department of Genetics, Medical School, Mazandaran University of Medical Sciences, Sari, Iran
- ▲ **Lecturer in Medical Genetics (2008 – 2009):** Department of genetics, Medical School, Babol University of Medical Science, Babol, Iran
- ▲ **Regional Genetic counselling clinic for Obs/Gyne referrals (2008 – 2009):** A joint clinic with Obs/Gyne specialists for infertility and recurrent miscarriage in Fatemeh Zahra Centre for Infertility, Babol University of Medical Sciences, Iran. Also designed a regional guideline for these two conditions to improve the referral system.
- ▲ **Cancer Genetics Clinic (full-time: 2008 – 2009):** Established a cancer genetics clinic in Shahid Rajaii Educational Hospital, Babol University of Medical Sciences, Babolsar, Mazandaran, Iran.
- ▲ **General Genetics Clinic (2008 – 2009):** Running a general genetic counselling clinic in Amirkola Genetic Centre, Babol University of Medical Sciences, Mazandaran, Iran.
- ▲ **Student Assistant (2005 – 2006):** Assistant to professor Haites in the department of clinical genetics at University of Aberdeen. I have also worked on the application of different risk assessment models in guidelines.
- ▲ **Trustee Doctor (1998 – 2001):** Doctor in charge of evaluation of sick leaves, re-visiting and re-examining patients who required sick leaves for a certain period of time referred by governmental organizations, Babol, Iran
- ▲ **General Medicine Clinic (1997-2000):** As a general practitioner (GP) visiting patients in my private clinic, Babol, Mazandaran, Iran
- ▲ **GP for Governmental Medical Centre (1993 – 1994):** Visiting patients in all fields of medicine (mostly emergency cases like MI, stroke, trauma etc.) in a regional medical centre as full time physician in charge, University of Mazandaran, Iran

Medical Administration Experiences

- ▲ **Head of Research Department of Iran Medical Council (2016 – present):** also a member and executive director of Research Council of Iran Medical Council.
- ▲ **Advisor to the members of Health Committee of Iranian Parliament (2016 – present):** this is an honorary position and I am consulted for health issues by MPs.

- ▲ **High Advisor to the Dean of International College of Tehran University of Medical Sciences (2017 – present):** International College of Tehran Medical University offers degree- and non-degree-based courses at different levels for all Medical professions including under- and post-graduate courses, short-term courses and workshops for medical specialists, general practitioners, dentists, nurses etc.
- ▲ **Member of Research Committee of Iran's Medical council (2017 – present):** Co-founder of Research committee of Iran's Medical Council and the major member of the committee. This committee draws the main research policies.
- ▲ **High Advisor to Principal (1999 – 2001):** Advisor for health affairs to the Chancellor of Babol University of Medical Sciences, Mazandaran, Iran
- ▲ **Acting Health Director (1998 – 2000):** Directing the health affairs for the University of Babol focusing on non-infectious diseases, such as beta Thalassemia.
- ▲ **Member of General Assembly of Iran's Medical Council ((1996 – 1998):** I served in IMC's general assembly where the major policies, missions, visions and the head of IMC and the members of its high court are discussed and appointed.
- ▲ **Head of Kordkoy and Bandargaz Medical Council (1996 – 1998):** I was the founder of this council and served in there as the principal.
- ▲ **Member of Regional Medical Organization and Ethic Committee (1995 – 1997):** Head of the regional Medical Ethics Committee and a member of general executive board of Iranian Medical Council. Member of state board for improving medical services and supporting medical professionals.
- ▲ **Health Administrator (1994 – 1997):** Head of Kordkooy & BandarGaz regional health and treatment services covering two general hospitals and 25 health centres (Province of Mazandaran and then Golestan)

Teaching

Iran:

- ▲ **Training (2018 – present):** As a member of faculty, I teach clinical disciplines for genetic services, in Genomic centre, Shahid Beheshti University of Medical Sciences, Tehran, Iran. I also give lectures on clinical genetic topics to other colleagues and students.
- ▲ **Lecturing (Jan – May 2010):** Medical genetics for Medical students and for Obstetricians, in Sari Medical School, Mazandaran university of Medical Sciences, Sari, Iran.
- ▲ **Lecturing (2009):** Clinical Genetic Conditions for Master Course in Medical Genetics, Babol University of Medical Sciences, Iran.
- ▲ **Lecturing (Dec 2008 – 2009):** General Genetics for 1st- and 2nd-year Medical and Dental students, Babol University of Medical Science, Mazandaran, Iran.

United Kingdom (UK):

- ▲ **Tutoring in MBChB (*Medicinae Baccalaureus, Chirurgiae Baccalaureus*) Phase 2, Year 3 (2007 – 2008):** As a part of Special Study Module, taught and tutored a group of year 3 medical students for their Student Selected Component III. The taught subject was Cancer Risk. (Course coordinator: Dr Black: corri.black@abdn.ac.uk)
- ▲ **Tutorial on risk/probability estimation in cancer genetics (Apr – Jan 2008):** Serial presentations on usage of risk assessment models in Genetics Clinic for Consultants, Special Registrars and other medical genetic staffs, Department of Medicine & Therapeutics (Course coordinator: Dr Ross: alison.ross3@nhs.net)
- ▲ **Demonstrator for practical anatomy (Feb – June 2005):** Taught practical anatomy in Biomedical courses for undergraduate medical students, University of Aberdeen (Course coordinators: Dr Stewart and Dr Bewick: i.stewart@abdn.ac.uk and g.s.bewick@abdn.ac.uk)

Thesis Supervised

- ▲ **Evaluation of The Relationship between rs1800629 Polymorphism in TNF- α Gene and The Incidence of Temporomandibular disorders (TMD):** A Thesis to Obtain Doctoral Degree in Dental Medicine. Tehran University of Medical Sciences (Reg. 287 Year 2019).
- ▲ **Investigation of The Effect of rs1799750 Polymorphism of MMP1 Gene on the Occurrence of Temporomandibular Disorders:** A Thesis to Obtain Doctoral Degree In Dental Medicine. Tehran University of Medical Sciences (Reg. 240 Year 2019).
- ▲ **Detection of Mutations in The Coding Regions of FAM83H and ENAM Genes in Patients with Imperfect Enamel (Amelogenesis Imperfecta) In Iranian Families (2018):** A Thesis to Obtain Doctoral Degree In Medicine. Tehran University of Medical Sciences (Reg. 159 Year 2018).

Conferences & Training Courses Attended (a summary)

- ▲ **Advances in Pregnancy Screening Tests and Genetic conditions (07/03/2019):** Iran Medical Council, Kharazmi Conference Centre, Shahid Beheshti university of Tehran.
- ▲ **Improvement of Clinical skills for diagnosis and management of Sexual disorders (24/10/2018):** This conference was held by Iranian association of General practitioners and partly discussed the possibility of Genetic predispositions.
- ▲ **A Conference on Professional behaviour in Medical activities (19/07/2018):** This was a conference held by Iran Medical Council and discussed professional and legal aspects of Medical activities which also included Medical Genetics. Conference centre of Milad Hospital, Tehran, Iran.
- ▲ **Forensic Medicine for Medical Practitioners (31/01/2018):** This was held by Iranian association of general practitioners and also included topics pertaining Medical Genetics.
- ▲ **Advances in Cardio-Pulmonary Resuscitation (24/11/2017):** This conference was held by Iranian Association of Emergency Medicine. This included vital knowledge that every doctor needs to know.

- ▲ **British Society for Human Genetics Conference 2007:** University of York (17-19/09/2007)
- ▲ **Gene, Embryos and Birth Defects 2006:** A clinical course held by Institute of Child Health, London (24 -26/04/2006)
- ▲ **Genetic in Modern Medicine 2005:** Royal College of Physician of Edinburgh (09/09/2005)
- ▲ **Paediatric Genetics 2004:** A clinical course held by University of Cardiff (21-22/06/2004)
- ▲ **Hereditary GI Cancers 2004:** XIIth symposium of the Netherlands foundation for the detection of hereditary tumours, Amsterdam (5-6/02/2004)
- ▲ **Manchester Cancer Genetic Course 2003:** A clinical course held by Central Manchester & Manchester children's university hospitals, Regional Genetic Service, St. Mary's Hospital (24-26/02/2003)
- ▲ **Muscular Dystrophy 2002:** University of Glasgow (Summer/2002)
- ▲ **British Human Genetic Conference 2002:** University of York (23-25/09/2002)
- ▲ **MSc taught course in genetics 2002:** University of Aberdeen (2001-2002)

Membership in Medical Societies

- ▲ **British Society for Human Genetics (BSHS; since 2002):** Also a member of Cancer Genetic Subgroup.
- ▲ **British Clinical Genetics Committee (Subdivision to BSHS; since 2002)**
- ▲ **Iranian Medical Council (since Feb/1992):** Membership No. 39213.

Presentations

- ▲ **Application of Risk Assessment methods in clinics for medical practitioners (2018):** as lecturer at Varamin workshop on medical genetic services for medical practitioners.
- ▲ **Comparison of COS BRCA Gene Risk Estimation Software with Other Models (9/11/2011):** NHS Grampian Research symposium, Aberdeen, UK. Award winning as the best poster and oral presentation from the clinical section. (Rebecca Whiting: rebeccawhiting@nhs.net)
- ▲ **COS outperforms other probability estimations models for detection of mutation status of BRCA1/2 genes 2007:** *British Society for Human Genetics Conference*, University of York, 17-19/09/2007: (Item 1:29 in page 9 in: <http://www.bshg.org.uk/ProgrammeFinal.pdf>).
- ▲ **Interaction between diet & breast cancer risk 2004:** *Postgraduate Student Assessment*, University of Aberdeen 2004
- ▲ **Result presentation of COS project 2004:** *Strasbourg University*, France 2004
- ▲ **A poster presentation on risk assessment models in breast cancer:** *Postgraduate Student Assessment*, University of Aberdeen 2003
- ▲ **Result presentation of COS project 2003:** *German Cancer Research Centre (DKFZ)*, Heidelberg, Germany 2003.

Publications

- ▲ **Roudgari H.**, Hemminki K, Brandt A, Sundquist J, Fallah M.; Prostate cancer risk assessment model: a scoring model based on the Swedish Family-Cancer Database., *Journal of Medical Genetics* 2012 May, Vol. 49(5): 345-52.
- ▲ **Roudgari H.**, Miedzybrodzka Z. & Haites N.; Probability estimation models for prediction of BRCA1 and BRCA2 mutation carriers: COS compares favourably with other models, *Familial Cancer* 2007, Vol. 7 (3): 199-212.
- ▲ **Roudgari H.**, Masson L. & Haites N.; Information Recovery in Cancer Families: value for risk estimation, *Familial Cancer* 2007 (Dec.), Vol. 6 (4): 415-443.
- ▲ **Roudgari H.** Farndon PA, Murray AD, Hardy C, Miedzybrodzka Z.;
Is PATCHED an important candidate gene for neural tube defects? Cranial and thoracic neural tube defects in a family with Gorlin syndrome: a case report. *Clinical Genetics* 2012, Vol. 82(1): 71-6.
- ▲ **Roudgari H.** COS outperforms other probability estimations models for detection of mutation status of BRCA1/2 genes: *British Society for Human Genetics Conference*, University of York, 17-19/09/2007: (Item 1:29 in page 9
- ▲ **Roudgari H.** Application of Risk Assessment Models for Familial Cancer (2007) *University of Aberdeen* [PhD dissertation/monograph].
- ▲ **Roudgari H.** Association between Vitiligo and Alopecia Areata: Probable causes & case report (1992) *Mashad University of Medical Sciences*, Mashad, Iran [MD thesis in Persian].

Grants

- ▲ Two Proposals are now nominated for NIMAD grants 2019 (nimad.ac.ir) including “Evaluation of Genetic Predispositions in Iranian Families with Increased Risk of Primary Hypertension” and “Estimation of Prevalence of Hereditary Breast and Ovarian Cancers in Iranian Population”. NIMAD ref. 984341 and 984204)
- ▲ **German Cancer Research Centre scholarship:** A short term scholarship from German cancer research centre (from September/2010 to November/2010) to carried out a study on prostate cancer risk assessment model that resulted in development of PCRAM method which has been published in journal of Medical Genetics (Kari Hemminki: K.Hemminki@dkfz-heidelberg.de)
- ▲ **Grampian NHS Endowment Grant:** A grant for one year (from Apr 2008, extended in 2010) to conduct a collaborative study between Universities of Manchester and Aberdeen on COS, a risk estimation model with application in Scottish guidelines for familial breast cancer (rebeccawhiting@nhs.net). At the moment the data from this study is under analysis.

Personal Skills

- ▲ **Languages:** Persian (Native), English (Highly Fluent) and German (Basic)
- ▲ **Computer:** experiences in SPSS, ROC curve, MS Office package, Medline, OVID, Reference Manage, Risk assessment Software, OMIM, ClinVar etc.
- ▲ **Communication:** Excellent team player, sociable, honest and loyal

- ▲ **Managing and Administration:** long term experiences in Medical and non-medical field of administration and management including from governmental health centres and University affairs to the private medical equipment business and Civil companies.

Fields of interests

- Interested in clinical genetics, especially cancer genetics and producing cancer *risk estimation models* including hereditary breast and ovarian cancer.
- Keen to work on interaction between genetic and environmental risk factors of cancer of any type and also on interactions between different contributing factors to cancer. I am interested in Case-Only Study for interaction between *genetic predispositions and environmental factors*.
- Special interest in genetic screening for cancers and clinical *guidelines*.
- Interested in working and establishing all kinds of cancer database and *cohort* studies

Referees

▲ **Professor Neva Haites**, OBE, FRCPath, FRCP, FMedsci, PhD

Honorary Consultant Clinical Geneticist (*my PhD Supervisor*)

Head of College & Vice-Principal

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▲ **Professor Michael Steel**, MB ChB, PhD, DSc FRCP, Ed MRCPPath

Emeritus Professor of Clinical Genetics

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▲ **Professor Kari Hemminki**, MD, PhD

Head of Department of Molecular Genetic Epidemiology

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▲ **Dr Zosia Miedzybrodzka**, MB ChB, PhD, MRCOG

Consultant Clinical Geneticist and senior lecturer in Medical genetics

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▲ **Professor Alireza Zali, MD**

Former Principal of Iran's Medical Council & Consultant Neurosurgeon and Head of Functional Neurosurgery Research Centre, Shahid Beheshti University of Medical Sciences, Tehran, Iran
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▲ **Professor Shahin Akhondzadeh, PhD, FBPhS**

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