



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE   6286  

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di ONCOLOGIA ED EMATO-ONCOLOGIA**

Scientist- in - charge: DR. VERNIERI \_\_\_\_\_

[Name and surname] RAMVEER CHOUDHARY

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	CHOUDHARY
Name	RAMVEER

### PRESENT OCCUPATION

Appointment	Structure
Post Doc- Borsista	IFOM ETS - Istituto AIRC di Oncologia Molecolare

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Bachelor of Science	University of Rajasthan	2008
Specialization			
PhD	Medicina dei sistemi- System Medicine (Molecular Oncology)	SEMM Foundation Università Degli Studi Di Milano	2018
Master	Master of Science (In Biology)	Tata Institute of Fundamental Research -NCBS, Deemed University	2012
Degree of medical specialization			
Degree of European specialization			
Other			



## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date registration	of	Association	City

## FOREIGN LANGUAGES

Languages	level of knowledge
Hindi	Mother language
English	C1
Italian	A2
Sanskrit	B1

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2014	<b>Marie Curie fellowship</b> , ITN-aDDress, ESR fellow. 2014-2016 'aDDress' ITN-Marie curie fellow ESR#4. Marie Curie Initial Training Network funded by the European Commission 7th Framework Programme, Grant Agreement no.: 316390
2008	<b>CSIR-DBT Junior Research Fellow (JRF)</b> 2008-2012.

## TRAINING OR RESEARCH ACTIVITY

<p><b>description of activity</b></p> <p><b><u>Research Experience: 1 M.Sc. by research (3.5 years) Aug2008 - March 2012</u></b></p> <p>Research Area :<i>Genetically encodable sensors for TElomeric Repeat containing RNA (TERRA) reveal differential localization in cell cycle.</i>(Manuscript under revision : A conformation-specific sensor of telomeric repeat-containing RNA. <i>EMBO Report</i>. Justin A. Yeoman, Ramveer Choudhary, Clément Nizak, and Yamuna Krishnan)</p> <p>Aug2008 - March 2012, M.Sc. by research, <i>Structure and Dynamics of Nucleic Acids</i>, NCBS-TIFR, Bangalore-560065, India</p> <p><b><u>Research Experience: 2 ( 16 Months) May 2012 to September 2013</u></b></p> <p>Topic: <i>Genetic transformation of structural and functional circuitry rewires the Drosophila brain.</i> May 2012 to September 2013, NCBS-TIFR, Bangalore, India</p> <p>Supervisor: Prof. K. Vijay Raghavan, Development and Neuroscience, NCBS-TIFR, Bangalore, India</p> <p>1. Sen S, Cao D, <b>Choudhary R</b>, Biagini S, Wang JW, Reichert H, VijayRaghavan K. <i>Genetic transformation of structural and functional circuitry rewires the Drosophila brain.</i> <i>Elife</i>. 2014 Dec 29;3:e04407. doi: 10.7554/eLife.04407. PMID: 25546307; PMCID: PMC4307181.</p> <p><b><u>Research Experience: 3 ( 2014-2018) PhD training</u></b></p> <p>Research Area : <i>Control of genomic integrity during replication termination in eukaryotes.</i></p> <p>Supervisor: Prof. Marco Foiani, <i>Genome Stability Laboratory</i>. IFOM ETS - The AIRC Institute of Molecular Oncology Milan, Italy.</p>
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‘aDDress’ ITN-Marie curie fellow ESR#4. aDDress is a Marie Curie Initial Training Network funded by the European Commission 7th Framework Programme, Grant Agreement no.: 316390

- Achar YJ, Adhil M, **Choudhary R**, Gilbert N, Foiani M.  
*Negative supercoil at gene boundaries modulates gene topology. Nature. 2020 Jan;577(7792):701-705. doi: 10.1038/s41586-020-1934-4. Epub 2020 Jan 22. PMID: 31969709.*
- Choudhary R**, Niska-Blakie J, Adhil M, Liberi G, Achar YJ, Giannattasio M, Foiani M.  
*Sen1 and Rrm3 ensure permissive topological conditions for replication termination. Cell Rep. 2023 Jul 25;42(7):112747. doi: 10.1016/j.celrep.2023.112747. Epub 2023 Jul 4. PMID: 37405920.*

**Research Experience: 4 ( 2018-to present ) POST DOC**

Supervisor: Prof. Marco Foiani, *Genome Stability Laboratory*. IFOM ETS - The AIRC Institute of Molecular Oncology Milan, Italy.

Research Area: Nuclear and non-nuclear pathways controlling genome integrity and plasticity

And Nucleotide Excision Repair controls RNA polymerase II levels.

PROJECT ACTIVITY

Year	Project
2008-2012	<i>Genetically encodable sensors for TElongeric Repeat containing RNA (TERRA) reveal differential localization in cell cycle.</i>
2012-2013	<i>Genetic transformation of structural and functional circuitry rewires the Drosophila brain</i>
2014-2018	<i>Control of genomic integrity during replication termination in eukaryotes.</i>
2018-onwards	Nuclear and non-nuclear pathways controlling genome integrity and plasticity And Nucleotide Excision Repair controls RNA polymerase II levels.

PATENTS

Patent



## CONGRESSES AND SEMINARS

Date	Title	Place
October 9-13, 2023	Cold Spring Harbor Asia conference on Yeast and Life Sciences. <i>Genomic elements mediating inter and intra chromosomal interactions</i> . Matsue, Japan, October 9-13, 2023. <a href="https://www.csh-asia.org/?content/1352">https://www.csh-asia.org/?content/1352</a>	Japan
September 03–07, 2023	EMBO Workshop, DNA topology and topoisomerases in genome dynamics. <i>Sen1 and Rrm3 ensure permissive topological conditions for replication termination</i> . 03 – 07 September 2023, Villars-sur-Ollon, Switzerland. <a href="https://meetings.ls2.ch/dna-topology-and-topoisomerases-in-genome-dynamics">https://meetings.ls2.ch/dna-topology-and-topoisomerases-in-genome-dynamics</a> and <a href="http://www.ls2.ch">www.ls2.ch</a> .	Switzerland
May 9-11, 2023	4DGenomics2023: Investigating, modelling and understanding the genome in space and time. <i>Genomic elements mediating inter and intra chromosomal interactions</i> . May 9-11, 2023, IFOM-ETS, Milan – Italy. <a href="https://www.ifom.eu/events/4DGenomics2023/">https://www.ifom.eu/events/4DGenomics2023/</a>	Italy
December, 14-18, 2022	CHROMOSOME STABILITY MEETING – 2022, 14-18 December 2022 at IISER, Thiruvananthapuram. <a href="https://conference.iisertvm.ac.in/chromosome-stability-2022/">https://conference.iisertvm.ac.in/chromosome-stability-2022/</a>	India
October, 10-13, 2022	Hybrid EMBO Workshop: The DNA damage response, immunity and aging from 10 – 13 October 2022 in Singapore. <a href="https://meetings.embo.org/event/20-dna-damage">https://meetings.embo.org/event/20-dna-damage</a>	Singapore
September 20–23, 2021	EMBO Workshop DNA Topology in genomic transactions, 20–23 September 2021, Virtual. <a href="https://meetings.embo.org/event/21-dna-topology">https://meetings.embo.org/event/21-dna-topology</a>	Virtual
June 1-6, 2022	86th Cold Spring Harbor Laboratory Symposium on Quantitative Biology Genome Stability & Integrity. <i>The RNA-DNA helicases Sen1<sup>SETX</sup> and Rrm3<sup>PIF1</sup> mediate replication termination</i> . June 1 - 6, 2022. Cold Spring Harbor Laboratory, USA. <a href="https://meetings.cshl.edu/meetings.aspx?meet=symp&amp;year=22">https://meetings.cshl.edu/meetings.aspx?meet=symp&amp;year=22</a>	USA
June 21-24, 2021	Cold Spring Harbor Asia conference on Yeast and Life Sciences. <i>The RNA-DNA helicases Sen1<sup>SETX</sup> and Rrm3<sup>PIF1</sup> mediate replication termination</i> . Yeast and Life Sciences, Suzhou, China, June 21-24, 2021. <a href="https://www.csh-asia.org/?content/359">https://www.csh-asia.org/?content/359</a>	China
Mar 9 – 12, 2021	EMBO   EMBL Symposium Friend or Foe: Transcription and RNA Meet DNA Replication and Repair. 9 - 12 Mar 2021, <a href="https://www.embl.org/about/info/course-and-conference-office/events/ees21-02/">https://www.embl.org/about/info/course-and-conference-office/events/ees21-02/</a>	Virtual
May 20-22, 2018	Mechanisms of Recombination 2018 May 20-22, 2018 The Francis Crick Institute, London, UK. <a href="https://www.abcam.com/Recombination2016">https://www.abcam.com/Recombination2016</a>	UK
May 19-23, 2014	Mechanisms of Recombination: 50th Anniversary Meeting of the Holliday Model. May 19-23, 2014 Alicante, Spain. <a href="http://www.abcam.com/index.html?pageconfig=resource&amp;rid=15932">http://www.abcam.com/index.html?pageconfig=resource&amp;rid=15932</a>	Spain



September 21 - 23, 2014	Ernst Klenk Symposium in Molecular Medicine. DNA Damage Response and Repair Mechanisms in Aging and Disease. Sept. 21 - 23, 2014. Medical Faculty, University of Cologne.	Germany
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## PUBLICATIONS

Books
[title, place, publishing house, year ...]
[title, place, publishing house, year ...]
[title, place, publishing house, year ...]

Articles in reviews
<b>Choudhary R</b> , Niska-Blakie J, Adhil M, Liberi G, Achar YJ, Giannattasio M, Foiani M. <i>Sen1 and Rrm3 ensure permissive topological conditions for replication termination. Cell Rep. 2023 Jul 25;42(7):112747. doi: 10.1016/j.celrep.2023.112747. Epub 2023 Jul 4. PMID: 37405920.</i>
Kolinjivadi AM, Chong ST, <b>Choudhary R</b> , Sankar H, Chew EL, Yeo C, Chan SH, Ngeow J. <i>Functional analysis of germline RAD51C missense variants highlight the role of RAD51C in replication fork protection. Hum Mol Genet. 2022 Dec 23;ddac281. doi: 10.1093/hmg/ddac281. Epub ahead of print. PMID: 36562461.</i>
Muñoz JC, Beckerman I, <b>Choudhary R</b> , Bouvier LA, Muñoz MJ. <i>DNA Damage-Induced RNAPII Degradation and Its Consequences in Gene Expression. Genes (Basel). 2022 Oct 26;13(11):1951. doi: 10.3390/genes13111951. PMID: 36360188; PMCID: PMC9689695.</i>
Purushothaman D, Bianchi LF, Penkov D, Poli A, Li Q, Vermezovic J, Pramotton FM, <b>Choudhary R</b> , Pennacchio FA, Sommariva E, Foiani M, Gauthier N, Maiuri P, Blasi F. <i>The transcription factor PREP1(PKNOX1) regulates nuclear stiffness, the expression of LINC complex proteins and mechanotransduction. Commun Biol. 2022 May 12;5(1):456. doi: 10.1038/s42003-022-03406-9. PMID: 35550602; PMCID: PMC9098460.</i>
Ajazi A, <b>Choudhary R</b> , Tronci L, Bachi A, Bruhn C. <i>CTP sensing and Mec1ATR-Rad53CHK1/CHK2 mediate a two-layered response to inhibition of glutamine metabolism. PLoS Genet. 2022 Mar 3;18(3):e1010101. doi: 10.1371/journal.pgen.1010101. PMID: 35239666; PMCID: PMC8923462.</i>
Kolinjivadi AM, Sankar H, <b>Choudhary R</b> , Tay LS, Tan TZ, Murata-Kamiya N, Voon DC, Kappei D, Hatakeyama M, Krishnan V, Ito Y. <i>The H. pylori CagA Oncoprotein Induces DNA Double Strand Breaks through Fanconi Anemia Pathway Downregulation and Replication Fork Collapse. Int J Mol Sci. 2022 Jan 31;23(3):1661. doi: 10.3390/ijms23031661. PMID: 35163588; PMCID: PMC8836099.</i>



Zardoni L, Nardini E, Brambati A, Lucca C, **Choudhary R**, Loperfido F, Sabbioneda S, Liberi G. *Elongating RNA polymerase II and RNA:DNA hybrids hinder fork progression and gene expression at sites of head-on replication-transcription collisions. Nucleic Acids Res. 2021 Dec 16;49(22):12769-12784. doi: 10.1093/nar/gkab1146. PMID: 34878142; PMCID: PMC8682787.*

Bruhn C, Ajazi A, Ferrari E, Lanz MC, Batrin R, **Choudhary R**, Walvekar A, Laxman S, Longhese MP, Fabre E, Smolka MB, Foiani M. *The Rad53<sup>CHK1/CHK2</sup>-Spt21<sup>NPAT</sup> and Tel1<sup>ATM</sup> axes couple glucose tolerance to histone dosage and subtelomeric silencing. Nat Commun. 2020 Aug 19;11(1):4154. doi: 10.1038/s41467-020-17961-4. PMID: 32814778; PMCID: PMC7438486.*

Achar YJ, Adhil M, **Choudhary R**, Gilbert N, Foiani M. *Negative supercoil at gene boundaries modulates gene topology. Nature. 2020 Jan;577(7792):701-705. doi: 10.1038/s41586-020-1934-4. Epub 2020 Jan 22. PMID: 31969709.*

Sen S, Cao D, **Choudhary R**, Biagini S, Wang JW, Reichert H, VijayRaghavan K. *Genetic transformation of structural and functional circuitry rewires the Drosophila brain. Elife. 2014 Dec 29;3:e04407. doi: 10.7554/eLife.04407. PMID: 25546307; PMCID: PMC4307181.*

#### Congress proceedings

Cold Spring Harbor Asia conference on Yeast and Life Sciences. *Genomic elements mediating inter and intra chromosomal interactions*. Matsue, Japan, October 9-13, 2023. <https://www.csh-asia.org/?content/1352>

EMBO Workshop, DNA topology and topoisomerases in genome dynamics. *Sen1 and Rrm3 ensure permissive topological conditions for replication termination*. 03 – 07 September 2023, Villars-sur-Ollon, Switzerland. <https://meetings.ls2.ch/dna-topology-and-topoisomerases-in-genome-dynamics> and [www.ls2.ch](http://www.ls2.ch).

4DGenomics2023: Investigating, modelling and understanding the genome in space and time. *Genomic elements mediating inter and intra chromosomal interactions*. May 9-11, 2023, IFOM-ETS, Milan – Italy. <https://www.ifom.eu/events/4DGenomics2023/>

86th Cold Spring Harbor Laboratory Symposium on Quantitative Biology Genome Stability & Integrity. *The RNA-DNA helicases Sen1<sup>SETX</sup> and Rrm3<sup>PIF1</sup> mediate replication termination*. June 1 - 6, 2022. Cold Spring Harbor Laboratory, USA. <https://meetings.cshl.edu/meetings.aspx?meet=symp&year=22>

Cold Spring Harbor Asia conference on Yeast and Life Sciences. *The RNA-DNA helicases Sen1<sup>SETX</sup> and Rrm3<sup>PIF1</sup> mediate replication termination*. Yeast and Life Sciences, Suzhou, China, June 21-24, 2021. <https://www.csh-asia.org/?content/359>

#### OTHER INFORMATION



Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

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Place and date: \_\_\_\_\_ Milano \_\_, \_\_\_\_\_ 23/01/2024 \_\_\_\_\_