### **Format for Scientist Profile**

• Name Dr. Aroonima Misra

• **Designation** Scientist D

• **Discipline/research area** Onco-pathology, Molecular Onco-pathology, Cancer prognostication, Hematopathology,

• **ORCID ID, h-index:** <u>0000-0003-2884-3600</u>, H index- 5

• Address (off.) ICMR-National Institute of Pathology, Safdarjung Hospital campus, New Delhi-110029

• **Telephone (off.)** +91-7838827003

• Email address drarooo2402[at]gmail.com

## • Educational Qualifications:

S.	Degree	Subject	University
No			
1	MBBS including	Medicine	Pt. RSU, Raipur,
	Internship		Chhattisgarh
2	MD	Pathology	Aligarh Muslim University
3	Fellowship	Hematopathology	TATA Medical center,
			Kolkata

# Other trainings:

S.	Training Name	Year	Subject	Place
No				
1	TATA Hemato	2015-	Hemato-	TATA memorial hospital,
	Oncology	3	ONCOLOGY	Parel, Mumbai and
	Observership,	months	including	ACTREC, Navi mumbai
	2016		molecular	
			hematology	
2	Pediatric	2017-2	Pediatric	Department of pediatric
	cytogenetics	months	cytogenetics	genetics, ALL India
	including FISH		including	Institute of Medixcal
	and Karyotyping		karyotyping	sciences, New Delhi

# • Research Experience:

S.No.	Positions	Name of the	From	To
	held	Institute		
1	Fellow	TATA medical center,	04-07-13	31-03-14
		Kolkata		
2	Academic	All India institute of Medical	12-05-14	11-12-16
	Senior	Sciences, AIIMS, New Delhi		
	resident			
3	Scientist B	Indian council of Medical	13-12-16	22-05-17
		Research, National Institute		
		of nutrition, Hyderabad		
4	Scientist C	Indian council of Medical	23-05-17	Till
	(Talent	Research, National Institute		present
	search	of Pathology, New Delhi		
	scheme)			

# • Awards

S.No	Name of Award	Awarding Agency	Year
1.	CSIR-Summer Research Training Programme- Mentor	CSIR- Summer Internship Mentor to 13 students	2020
2.	Cancer Genetics and Genomics programme Annual Short-term fellowship programme Fall 2018	Duke Cancer Center, 20 Duke Medicine Circle Durham, North Carolina, U.S.A (Not availed due to Pregnancy and maternity)	2018
3.	<b>Department of biotechnology</b> ( <b>DBT</b> ) international travel award for junior scientists	Department of biotechnology (DBT)	2015
4.	ISLH BEREND HOUWEN AWARD Milan, Italy.	International society of lab Hematology, Milan, Italy	2016
5.	HAA & HANZ international award for best oral paper	Haematology Society of Australia and New Zealand, Adelaide	2015
6.	Academic Awards-  5 University and college Gold Medals. silver medal and 2 certificates of Merit	Pt. Jawaharlal Nehru Medical College, Pt RS University, Raipur, C.G	2002- 2007
7.	2nd prize for best oral presentation at National symposium for emerging trends in behavioral sciences, AMU	National Society of behavioural change and neurosciences	2012

Aligarh	

- Membership/Fellowship of Professional Societies/Associations :
- 1. Life Member- Indian society of hematology and blood transfusion
- 2. Life Member- Molecular pathology association of India
- **3. Annual Member- Federation of Clinical Immunology Societies** (FOCIS)
- **Publications** (write numbers only National, International)- 20
  - 10 best publications (preferably with citations and impact factor)

S.	Authors	Title	Name	ID	Type/	Yea
no			of		Status	r
			journal		Statas	1
1.	Verma S,	Systematic review of	Am J	Impact	PMID	202
1.		•		_		
	Dhanda H,		Blood	factor:	:	1
		myeloid leukemia Am J	Res.	0.8.	34824	
	B, Tanwar P,	Blood Res. 2021			880;	
	Chaudhry S,				PMCI	
	Siraj F, <b>Misra</b>				D:	
	<b>A.</b>				PMC8	
					61079	
					3	
2.	Gera A *, Misra	A hungry Histiocyte,	Int J	impact	Origin	202
			Lab	factor:	al	1
		myriad of problems:		2.401	article	
	Mehndiratta S	Diagnostic challenges for				
	Triomanana S	Pediatric HLH.	1089			
3.	Sirai F Tanwar	Analysing "tear-drop" prints	Am J	Impact	Origin	202
<i>J</i> .	_	of acute promyelocytic	Blood	factor:	al	1
	_	± • •			article	1
	•	leukemia (APML):	Res.	0.8.	article	
	_	immunophenotypic	2021			
		prognostication of APML				
	S, Misra A.					
4.	Das S*, Misra	. Study of transfusion-	Am J	Impact	Origin	202
	A*, Kashyap A,	related iron overload (trio)	Blood	factor:	al	1

	Meena S, Singh A, Aggarwal KC	in pediatric patients with hematological malignancy and bone marrow failure syndromes.	Res.202	0.8.	article	
5.	Chauhan S, Rishi B, Tanwar P, Mehdi G, Arif SH, Rabbani T, Rai S, Siraj F, <b>Misra A</b> .		Am J Blood Res. 2021	Impact factor: 0.8.	Origin al article	202
6.	Das S, Kashyap A, Chopra N, Aggarwal KC, Misra A*, Singh A.	Ferritin as an indicator of disease activity in Hodgkin lymphoma in pediatric patients. PMCID: PMC8918701.	Am J Blood Res. 2022	Impact factor: 0.8.	Feb 15;12( 1):11- 16.	202
7.	Sandeep rai, U Bhardwaj, Aroonima Misra (corresponding author)	Comparison between photostability of alexa fluor 448 (Beckman coulter) and alexa-fluor 647 (Beckman coulter) with conventional dyes- FITC and APC by flow cytometry	Internat ional journal of lab hemotol ogy,	39:1;67 -68 impact factor: 2.401	67-68	8
8.	Aroonima Misra, Chopra, A., Kumar, R. and Bakhshi, S.	Diagnostic considerations in juvenile myelomonocytic leukemia in tropical settings.	Internat ional journal of lab hemotol ogy,	39 impact factor: 2.401	e77- e79 doi:10 .1111/ ijlh.12 626	201
9.	Misra, A., Verma, D., Chandramohan, J., Bakhshi, S., Kumar, R., Gajendra, S., and Chopra, A.	Nuclear cupping in the blasts—more to the cup than myeloid. doi: 10.1002/hon.2180.	Haemat ological oncolog y, Impact factor: 3.49	34	171- 173	201
10.	Aroonima Misra, Jyoti Mishra, Jagan Chandramohan,	Old but still relevant: High resolution electrophoresis and immunofixation in multiple myeloma.	IJHBT. Impact factor: 0.26.	32 issue 1	10-17	201

Atul Sharma,			
Vinod Raina,			
Rajive			
Kumar, Sushant			
Soni, Anita			
Chopra.			

## • Projects:

- Our laboratory is primarily focused at working with oncopathogeneis and understanding
  the prognostic factors associated with hematological malignancies especially those of
  pediatric and adult AML and chronic myeloid leukemia.
- Our laboratory is also working on liquid biopsy as a tool for prognostication in various cancers.
- Our laboratory is also working towards- Innovative ways to make the prognostication services accessible to all the resource constraint population in leukemia.
- Collaborative projects towards improving patient outcomes in hematological malignancies with risk stratification and translation.
- Projects on Survivorship, cancer care and nutritional aspects of hematological malignancies.
- Development of novel 3D models for experimentation of drug and sensitivity assay for rare malignant phenotypes/genotypes in leukemia.

### **Collaborative Institutes:**

- 1. All India Institute of Medical Sciences, New Delhi
- 2. Vardhman Mahavir Medical college and Safdarjung Hospital, New Delhi
- 3. Maulana Azad medical college, New Delhi.
- 4. National Institute of Biologicals, Noida
- 5. RML and PGIMER hospital New Delhi
- 6. SGPGI Hospital, Noida, U.P.
- 7. GTB hospital, New Delhi
- 8. ICMR-National Institute of Nutrition, Hyderabad

# **Projects and Publications:**

- Our laboratory is primarily focused at working with oncopathogeneis and understanding
  the prognostic factors associated with hematological malignancies especially those of
  pediatric and adult AML and chronic myeloid leukemia.
- Our laboratory is also working towards- Innovative ways to make the prognostication services accessible to all the resource constraint population in leukemia-like use of dried blood spots and liquid biopsies.
- Collaborative projects towards improving patient outcomes in hematological malignancies with risk stratification and translation.
- Projects on Survivorship, cancer care and nutritional aspects of hematological malignancies.
- Development of novel 3D models for experimentation of drug and sensitivity assay for rare malignant phenotypes/genotypes in leukemia.

### A) Principal Investigator Projects: Present: FIVE:

1) Extra Mural-Medical Innovation fund project "Development of a simple prognostic scoring model IPSS (Integrated Prognostic Scoring System) for newly diagnosed cytogenetically normal acute myeloid leukemia"

Medical Innovation Fund, ICMR- 10 lacs

Collaborative Institutes:

- 1. All India Institute of Medical Sciences, New Delhi
- 2. Vardhman Mahavir Medical college and Safdarjung Hospital, New Delhi
- 2) **ICMR Extramural fund-** 'Onco-proteome Profiling in drug resistant (chemoresistant) acute lymphoid leukemia by selective inhibition and pathway analysis of PI3K/Akt/mTOR axis' ICMR-29.95 lacs

Collaborative Institutes:

- 1. All India Institute of Medical Sciences, New Delhi
- 2. Vardhman Mahavir Medical college and Safdarjung Hospital, New Delhi

3) **ICMR Extramural fund**- "Identification of novel synergistic inhibitors by studying differences in sensitivity towards pathway regulators and triple inhibitors of PI3K/Akt/mTOR axis in T cell ALL" IRIS ID-2021-9221

ICMR-30.5 Lacs

#### Collaborative Institutes:

- 1. All India Institute of Medical Sciences, New Delhi
- 2. Vardhman Mahavir Medical college and Safdarjung Hospital, New Delhi
- 3. Maulana Azad medical college, New Delhi.
- 4) **ICMR Intra Mural fund**:" Performance Evaluation of the droplet digital PCR for deep molecular response for monitoring in BCR-ABL-1 positive malignancies" Funding-10 Lacs

### Collaborative Institutes:

- 1. All India Institute of Medical Sciences, New Delhi
- 2. Vardhman Mahavir Medical college and Safdarjung Hospital, New Delhi
- 3. Maulana Azad medical college, New Delhi.
- 4. National Institute of Biologicals, Noida
- 5. RML and PGIMER hospital New Delhi
- 6. SGPGI Hospital, Noida, U.P
- 7. GTB hospital, New Delhi
- 5) **ICMR Intra Mural fund** "Standardization of RNA Extraction from Dried Blood Spots in Leukaemia Samples".

Funding-10 Lacs

#### Collaborative Institutes:

- 1. All India Institute of Medical Sciences, New Delhi
- 2. Vardhman Mahavir Medical college and Safdarjung Hospital, New Delhi
- 3. Maulana Azad medical college, New Delhi.
- 4. National Institute of Biologicals, Noida

- 5. RML and PGIMER hospital New Delhi
- 6. SGPGI Hospital, Noida, U.P
- 7. GTB hospital, New Delhi

### **Completed Projects:**

1) Extra mural Funded Project Role of 2-Hydroxyglutarate as a circulatory biomarker in Gliomas"

ICMR Extramural Fund, ICMR- 15 Lacs

**Status:** Co-Investigator

2) CHAMPS Pilot project- International Funding- Bill and Melinda Gates Foundation- Titled "A pilot study to determine causes of death in under-five children in a tertiary hospital in India using the MITS technique."

15 Crore aggregate funding, Institute funding 5.8 Crore

Status: Co-Investigator