



ರಾಜೀವ್ ಗಾಂಧಿ ಆರೋಗ್ಯ ವಿಜ್ಞಾನಗಳ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಕರ್ನಾಟಕ  
Rajiv Gandhi University of Health Sciences, Karnataka

*Dr. S. Sacchidanand* MD,DVD,DHA,FRCP (Glasgow)  
Vice-Chancellor

No. RGU/VC/PS/09/21-22

25/05/2021

## CIRCULAR

This is to bring to the awareness of all the research scholars of our affiliated institutions that the Kidwai Memorial Institute of Oncology, Bengaluru has established an advanced Molecular Oncology Lab, which provides tests including genetic, molecular, and IHC tests.

These services are being provided at very economical rates for the researchers of our affiliated colleges. Therefore, the researchers may be informed of the services in your respective institutions.

DR. S. SACCHIDANAND

To,

Heads of All Affiliated Institutions, to bring to the notice of their research scholars.



# ಕಿಡ್ವಾಯಿ ಸ್ಮಾರಕ ಗಂಧಿ ಸಂಸ್ಥೆ

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸ್ವಾಯತ್ತತಾ ಸಂಸ್ಥೆ  
ಪ್ರಾದೇಶಿಕ ಅರ್ಜಿಯ ಸಂಶೋಧನೆ ಮತ್ತು ಚಿಕಿತ್ಸಾ ಕೇಂದ್ರ

## KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY

GOVERNMENT OF KARNATAKA AUTONOMOUS INSTITUTION  
(REGIONAL CENTRE FOR CANCER RESEARCH & TREATMENT  
MEMBER OF INTERNATIONAL UNION AGAINST CANCER)

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ಡಾ|| ಎಂ.ಎಚ್. ಮರಿಗೌಡ ರಸ್ತೆ,

ಬೆಂಗಳೂರು - 560 029.

Dr. M.H. Marigowda Road,  
Bengaluru - 560 029.  
KARNATAKA, INDIA.

NO:PER/Cab-1/D-3-59a/2021

Dt: 20.5.2021

The Hon'ble Vice Chancellor  
Rajiv Gandhi University of Health Sciences  
Jayanagar, IV Block  
Bangalore.

Sir,

Sub: Availability of advanced Molecular tests in our Institute

This is to inform you that we have established an advanced Molecular Oncology lab in Kidwai Memorial Institute of Oncology. I am enclosing the list of available tests including genetic/molecular/IHC tests. The rate fixed for these advanced tests are very low and I would request the University to utilize these services for research purpose at reduced rates.

A copy of the facilities available in the Molecular Laboratory and tests conducted are enclosed herewith.

Thanking you,

Yours faithfully,

Dr.C.Ramachandra  
DIRECTOR

Copy to  
Dr.Venkatesh,  
Director,  
Advanced Research Dept.  
RGUHS.

**List of Equipments**

Sl No	Equipment Name	Model	Manufacturer	Total Nos
1	Autoclave Rotek plus	CAT-PAN-04Dī-SS	Rotek (Vasa scientific)	1
2	BD FACSLyric Flow cytometer	BD FACSLyric	BD	1
3	Bench top centrifuge	CAT-R80BL	REMI	1
4	Bio safety cabinet 1300 seriesA2	1374	Thermo Fisher Scientific	2
5	Bio safety cabinet 1300 seriesA2	1384	Thermo Fisher Scientific	1
6	Bio safety cabinet 1300 seriesA2	1336	Thermo Fisher Scientific	1
7	Biomeck i5 automated workstation	REF-B87583	Beckman coulter	1
8	Carl zeiss Fluorescent Microscope	Imager:Z2	Zeiss	1
9	Centrifuge Sorvall ST 16R	REF-75004380	Thermo Fisher Scientific	1
10	Centrifuge Sorvall ST4R Plus	REF-75009924	Thermo Fisher Scientific	1
11	Hybridization chamber for FISH	TDH-500	Meta systems	1
12	DRY Bath	CAT-DBI-2		1
13	Echo 525 (Echo Acoustic handler)		Beckman coulter	1
14	Eppendorf AG Centrifuge 5804R	5804R	eppendorf	1
15	HERACELL VIOSA 16oi CO2 Incubator	REF-51030478	Thermo Fisher Scientific	1
16	Ion genStudio Next Generation Sequencer	S5 Prime	Thermo Fisher Scientific	1
17	Ion one touch 2 instrument	REF-INS1005527	Thermo Fisher Scientific	1
18	Ion one touch ES	8441-22	Thermo Fisher Scientific	1
19	Ion chip minifuge 220-240V	REF-4479673	Thermo Fisher Scientific	1
20	jnmedsys, Clarity reader	C104	Jnmedsys	1
21	jnmedsys, clarity scalingB28:M30	C103	Jnmedsys	1
22	jnmedsys,clarity autoloader	C102	Jnmedsys	1
23	Quantstudio 5 RT-PCR Instrument (384 well)	A28140	Thermo Fisher Scientific	2
24	Quantstudio 5 RT-PCR Instrument (96 well)	A34322	Thermo Fisher Scientific	3
25	VERITI 96well thermal cycler	4375786	Thermo Fisher Scientific	2

26	Purification Automate Kingfisher Flex	5400630	Thermo Fisher Scientific	3
27	Laboratory Refrigerator 2-8	PLR386	Thermo Fisher Scientific	6
28	Laboratory Refrigerator -20	PLF276	Thermo Fisher Scientific	1
29	Laboratory Refrigerator-20°	FFGL3030V	Thermo Fisher Scientific	1
30	Laboratory Refrigerator -80	902GP	Thermo Fisher Scientific	1
31	Laboratory Refrigerator -80	8940086V	Thermo Fisher Scientific	1
32	Myspin 12-1	75004081	Thermo Fisher Scientific	2
33	Work station for PCR	CAT-PCR-STN-02		2
34	Water Bath (Precision GP20)	TSGP20	Thermo Fisher Scientific	2
35	Spinix vertex shaker	CAT-3020	TARSON	9
36	Hot air oven	HAO-1414	Vasa scientific	1
37	Ice flaker LMIF-30	LMIF-30	Labman	1
38	Magnetic stirrer	SMLH	REMI	1
39	Mix mate eppendoff		Eppendorf	1
40	Qubit 4 Fluorometer	REF-Q33	Thermo Fisher Scientific	1
41	Weighing Balance		Aczel	1
42	Weighman weighing scale		Vasa scientific	1
43	Vitros Eci immunodiagnostic system		Jhonson & Jhonson	1
44	Sufogie disinfect machine		Vasa scientific	1
45	HP Z240 SFF Workstation (system)	PN-L8T14AV	HP	1
46	Colour Laser Jet Pro 154a	T6B51A	HP	1
47	Dell server	PN-A34436	Dell	1
48	Dell server	PN-A36305	Dell	1
49	Epson LX-310 (PRINTER)	PA71A	Epson	1
50	EVOS M7000 with computer set	REF-AMF7000	Invitrogen	1
51	LCD Display monitor	PN-1PX48AA	HP	1
52	Pipette (100-1000 µL)	4642090	Thermo Fisher Scientific	6
53	Pipette (20-200 µL)	4642080	Thermo Fisher Scientific	7
54	Pipette (02-20 µL)	4642050	Thermo Fisher Scientific	6

55	Pipette (0.2-2 $\mu$ L)	4642010	Thermo Fisher Scientific	4
56	Multichannel Pipette (1-10 $\mu$ L)	4662000	Thermo Fisher Scientific	1
57	Multichannel Pipette (10-100 $\mu$ L)	4662020	Thermo Fisher Scientific	1
58	Multichannel Pipette (30-300 $\mu$ L)	4662030	Thermo Fisher Scientific	1
59	Orbitrap ID-X Tribrid Mass Spectrophometer	FSN03-10000	Thermo Fisher Scientific	1
60	Vanquish Horizon UHPLC System, Integrated biocompatible system	IQLAAAGABHFAPU MZZZ	Thermo Fisher Scientific	1
61	Mass Frontier Spectral Interpretation Software	OPTON-30976	Thermo Fisher Scientific	1

**List of Investigation currently done in Centre for Advanced Genomics and Molecular Diagnostics**

<b>PCR/Sanger sequencing based tests</b>	KRAS mutation analysis
	NRAS mutation analysis
	BRAF mutation analysis
	EGFR mutation analysis
	BCR-ABL Quantitative with or without breakpoint
	PML-RARA gene fusion analysis Qualitative/Quantitative
	Myeloproliferative Neoplasm reflex panel
	Pediatric leukemia panel
	AML comprehensive panel
	ALL comprehensive panel
	PIK3CA mutation analysis
	MSI by PCR sanger sequencing
	JAK2 mutation detection
	T-cell receptor gene rearrangement
	IGH gene rearrangement
	c-KIT mutation analysis
	DPD gene mutation analysis
	CEBPA mutation analysis
	IRMA (Imatinib Resistance Mutation Analysis)
	UGTA1A polymorphism
	HPV 16&18 detection
	Covid-19 by Real time PCR
	HBV DNA PCR
HCV RNA PCR and Genotyping	
<b>Next Generation Sequencing (NGS) based tests</b>	BRCA1 & 2 basic panel
	Hereditary breast and ovarian cancer panel
	Lung DNA panel
	Lung RNA panel
	Colorectal cancer panel
	Cancer Hotspot panel
<b>FISH based tests</b>	Lung cancer panel- ALK & ROS1
	Myeloma Panel- IGH, ATM-TP53, DEL/LAMP/12cen
	ALL panel- BCR/ABL1, KMT2A, ABL2, ETV6-RUNX1
	MDS panel- Del 20q, 5q31/5q33/5p31, Del7 (q22, q31)
	CLL panel- DLEU/LAMP/12cen, ATM TP53
	Her2neu
<b>Flow cytometry Based tests</b>	AML MRD panel
	T-ALL MRD panel
	B-ALL MRD panel
	Myeloma MRD panel
	MDS panel
	CD34 enumeration
	PNH flow cytometry
	PID panel

	HLA B27 flow cytometry
	CD4, CD8 count
	Leukemia basic panel
	Lymphoma basic panel
<b>IHC based test</b>	AFP, AR, Beta-catenin, CD3, CD117, CD79a, CK 5 & 6, CDH17, CEA, Calretinin, Chromogranin, Cyclin D1, Desmin, ER, E-cadherin, GATA-3, HER2, Inhibin-A, Ki-67, MUC-1, Myogenin, MLH1, MSH2, PAX5, PAX8, PMS2, PSA, PR, S100, Synaptophysin, TTF1, VEGF, VIMENTIN, WT1 and many more IHC markers are done for the characterization of cancer
	Albumin
	Ammonia
	Alanine Transaminase (ALT/SGPT)
	Alkaline Phosphatase (ALP)
	Amylase
	Calcium
	Cholesterol
	Chloride (Cl <sup>-</sup> )
	Creatine kinase (CK)
	CK-MB
	Creatinine
	D-Dimer
	Gamma Glutamyl Transferase (GGT)
	Glucose (FBS/PPBS/RBS/)
	HDL-Cholesterol
	Glycosylated Hemoglobin (HbA1C)
	Iron
	Lactate dehydrogenase (LDH)
	Lipase
	Magnesium
	Phosphorous
	Potassium (K <sup>+</sup> )
	Sodium (Na <sup>+</sup> )
	Serum osmolality
	Total Protein
	Triglycerides
	Troponin -I
	Troponin -T
	Uric Acid
	Urea
	Alpha Fetoprotein(AFP)
	Anti-Thyroglobulin (Anti TG)
	Beta-HCG

**Clinical Chemistry based assays**

β2 Microglobulin
CA125
CA15.3
CA19.9
Carcino Embryonic Antigen (CEA)
Cortisol
Folate
Free T3
Free T4
Ferritin
HE4
Interleukin-6 (IL-6)
Parathyroid Hormone (PTH)
Procalcitonin (PCT)
Tri IodoThyronine (T3)
Thyroxine (T4)
Thyroglobulin
Prostate specific Antigen (PSA)
Thyroid Stimulating Hormone (TSH)
Vitamin B12
Vitamin D Total
Serum Electrophoresis
Serum Immunofixation
Serum Free light chain assay- Kappa and Lambda
Liver Function Test (Total and Direct Bilirubin, Total Protein, Albumin, Globulin, ALP, GGT, AST, ALT)
Renal Function Test 1 (RBS, Urea, Creatinine, Sodium, Pottasium, Chloride)
Cardiac Enzymes (CK,CKMB,TROP-T,TROP-I)
Electrolytes (Na ,K,Cl)
Renal Function Test 2 (Na,K,Cl,Urea ,Crea ,GLU,Phos ,MG ,Ca,Uric Acid ,ALB,ALKP )
Chemotherapy Panel- ALT, AST, Total bilirubin, creatinine, Calcium
Serum Chromogranin A
Covid Ab IgG & Total
Serum Methotraxate
Digoxin
Digitoxin
Amphitamines
Barbiturates
Cannabinoids
Cociane
LSD
Ethanol
Methadone
Methaqualone



	Opiates
	Acetaminophen
	Carbamazepine
	Phenobarbitol
	Phenytoin
	Procainamide
	Salicylate
	Theophylline
	Tobramycin
	Sirolimus
	Tacrolimus
	Valproic acid
LC-MS based assays	Proteomic analysis
	Narcotics like- Marijuana, Opioids, Heroin, Codeine, Oxycodone, Morphine, Anabolic agents like-Bolandiol, Danazol, Metenolone, Nandrolone etc, Salbutamol, Salmeterol, terbutaline
	Metabolic screening in disorders like Cancer and Metabolic disorders etc
	Amino acid analysis in body fluids
	Therapeutic drug monitoring (TDM) of drug like- Afatinib, Axitinib, Dabrafenib, Dasatinib, Erlotinib, Gefitinib, Ibrutinib, Imatinib, Nilotinib, Sunitinib, Vandetanib, Vemurafenib, 5-FU, Methotrexate, Busulfan.
	Steroid Hormone assays like- Adrosterone, DHEA, 17B-estradiol (E2), Estrone (E2), 17-a-Hydroxyprogesterone, Testosterone.