

ANNEXURE II

List of Research Protocols

Section	RP No	Title	Year
Epidemiology	1	Epidemiological pilot study in Bangalore city and surrounding villages (Bangalore, Mandya and Kolar).	1959
Epidemiology	2	Tuberculin sensitivity in young (0-4) years children as an index of TB in the community (An epidemiological study in Bangalore city and surrounding villages).	1959
Epidemiology	3	The effect of injecting increased volume of tuberculin diluent on the pattern of tuberculin sensitivity.	1959
Control	4	Trial of allergy producing capacity of Madras BCG vaccine among south Indian school children under optimal conditions.	1959
Epidemiology	5	Post-vaccination tuberculin sensitivity and vaccination complications in relation to the pre-vaccination tuberculin sensitivity.	1959
Epidemiology	6	Training survey in Doddaballapur taluk.	1960
Sociology	7	Protocol including work instructions for the migration study in the major BCG trial area.	1960
Control	8	Tuberculin sensitivity in random selected villages of the BCG trial taluks.	1960
Sociology	9	Subjective reaction to BCG to all studies: A pilot study.	1960
Sociology	10	Pilot study on awareness of tuberculosis in some Mysore villages.	1960
BCG	11	BCG trial.	1960
Sociology	12	Plan for a pilot study on the applicability and acceptability of INH treatment in Kirangur (Mandya district).	1960
Control	13	Local lesion after BCG vaccination given irrespective of tuberculin sensitivity.	1960
Epidemiology	14	Comparison of the relative value of three different X-ray procedures.	1960

Control	15	Comparison of various tuberculins in the measurement of tuberculin sensitivity.	1960
Epidemiology	16	A comparison of four tuberculin fractions in terms of their specificity to infection with mycobacterium tuberculosis.	1960
Sociology	17	Action taking in patients diagnosed at LWC, Bangalore and advised treatment.	1960
Sociology	18	Awareness of tuberculosis and economic loss caused by tuberculosis in some Mysore villages.	1960
Epidemiology	19	A baseline tuberculosis prevalence survey in Tumkur district.	1960
Epidemiology	20	Training.	1960
Control	21	Investigations of nationally applicable tuberculosis control programmes.	1961
Control	22	X-ray case finding.	1961
Sub protocols:			
Control	22.1	X-ray case-finding in mass campaign approach (I Phase).	1961
Control	22.2	X-ray case finding in the community development approach (I Phase).	1961
Control	22.3	X-ray case finding in the mass campaign approach (II Phase).	1961
Control	22.4	X-ray case finding in the community development approach (II Phase).	1961
Control	22.5	X-ray case finding in the mass campaign approach in conjunction with MCS (III Phase).	1961
Control	22.6	X-ray case finding in the community development approach in conjunction with CDS (RP/23/6) (III Phase).	1961
Control	22.7	X-ray case finding in the community development approach in areas previously covered (IV Phase).	1961
Control	22.8	X-ray case finding in the mass campaign approach in conjunction with MCS (V Phase)	1961
Control	22.9	X-ray case finding in the mass campaign approach (VI Phase).	1961

Control	23	Sputum case finding.	1961
		Sub protocols:	
Control	23.1	Sputum case finding in the mass campaign approach (I Phase)	1961
Control	23.2	Sputum case finding in the community development approach (I Phase).	1961
Control	23.3	Sputum case finding in the mass campaign approach (II Phase).	1961
Control	23.4	Sputum case finding in the community development approach (II Phase).	1961
Control	23.5	Sputum case finding in the mass campaign approach (III Phase).	1961
Control	23.6	Sputum case finding in the community development approach (III Phase).	1961
Control	23.7	Sputum case finding in the community development approach in areas previously covered (IV Phase).	1961
Control	23.8	Sputum case finding with the house-to-house BCG vaccination campaign (V Phase).	1961
Control	24	Treatment protocol.	1961
		Sub protocols:	
Control	24.1	Treatment by the district tuberculosis centre, Tumkur.	1961
Control	24.2	Treatment through primary health unit.	1961
Control	24.3	Treatment through the NES (Gram sevak).	1961
Control	24.4	Treatment through village panchayat.	1961
Control	24.5	Integrated treatment through primary health unit (II Phase).	1961
Control	24.6	Treatment through rural dispensaries and hospitals (III Phase).	1961
Control	24.7	Treatment through the district tuberculosis clinic (V Phase).	1961
Control	24.8	Treatment through rural hospitals, dispensaries and PHU's (IV Phase).	1961

Control	24.9	Treatment of town patients by the district tuberculosis centre (VI Phase).	1961
Control	25	Assessment protocol.	1961
Control	26	One year follow up of 0-4 year children in an urban area.	1961
Epidemiology	27	One year follow up of persons given wet vaccines (follow-up of RP/4).	1961
Epidemiology	28	Resurvey of villages examined in Bangalore and Tumkur districts during the National Tuberculosis Survey, 1955-58.	1961
Sociology	29	Self administered drug treatment carried out amongst the patients diagnosed and treated under the supervision of the Lady Willingdon Tuberculosis Control and Training Centre, Bangalore.	1961
Sociology	30	Action taking among symptomatic tuberculosis cases in Tumkur district.	1961
Epidemiology	31	Follow up of X-ray abnormal of the 20 last "untreated" villages of baseline survey.	1961
Sociology	32	Community awareness of tuberculosis.	1961
Epidemiology	33	Longitudinal survey in rural communities.	1961
Sociology	34	Qualitative assessment of operational investigations, Tumkur.	1961
Epidemiology	35	Baseline tuberculosis prevalence survey in Ananthpur:	1961
Sociology	36	Reasons for not utilising the X-ray diagnosis opportunity offered in connection with the BCG programme in Bangalore city.	1961
Sociology	37	Community awareness of tuberculosis. Supplement to RP/32.	1961
Sociology	38	Extended study of prevalence of symptoms in NSS study area.	1961
Bacteriology	39	A pilot investigation for the detection of isoniazid in urine by a simple impregnated filter paper method.	1961
Sociology	40	A pilot sociological study of patient behaviour during treatment.	1961
Bacteriology	41	Technical assessment of a field culture inoculation technique carried out in a district laboratory and the comparison of spot	1962

		and overnight specimen in mass case finding.	
Sociology	42	Second pilot study on patient behaviour.	1962
Control	43	Assessment of district tuberculosis control programmes: a pilot study in the Ananthapur district.	1962
Bacteriology	44	Assessment of house to house BCG work as integrated with district tuberculosis programme, Ananthpur.	1962
Epidemiology	45	Second round of the longitudinal survey (first follow up).	1962
Epidemiology	46	A Pilot study on the allergy eliciting capacity of 1TU RT23 exposed to higher temperatures for short periods.	1962
Epidemiology	47	Second pilot study on allergy eliciting capacity of 1TU RT23 (with tween) exposed to higher temperature for short periods	1962
Control	48	Suitability of isoniazid with thiacetazone of mass chemotherapy studies among rural and urban patients.	1962
Bacteriology	49	Bacteriological aspects of mass chemotherapy with thiacetazone as an adjuvant to isoniazid among tuberculous patients in Tumkur town.	1962
Sociology	50	Sociological aspects of mass chemotherapy with thiacetazone.	1962
Bacteriology	51	Comparison of fresh liquid and freeze-dried BCG vaccines produced from Danish and Japanese strains in BCG vaccine laboratory, Madras.	1962
BCG	52	Comparison of allergy inducing capacity of freeze-dried BCG vaccines containing glutamate and glutamate plus dextrin as adjuvants.	1962
Sociology	53	Social and other stress factors in the causation of tuberculous infection and disease	1962
Sociology	54	Action taking among tuberculosis patients.	1962
BCG	55	Possible effect of higher concentration quinosol in 1TU RT23 (tween) on tuberculin reactions among sanatoria patients and BCG vaccinated and unvaccinated school children.	1963
BCG	56	Comparison of allergy inducing capacity of liquid vaccine manufactured with higher and usual pressure during filtration.	1963

Statistics	57	BCG trial associated with longitudinal survey by the NTI, India.	1963
BCG	58	Comparison of longitudinal and transverse diameters of indurations to tuberculin tests.	1963
Epidemiology	59	Enhancing effect of previous tuberculin tests in different age and sex groups.	1963
BCG	60	Pre and post-vaccination allergy eliciting capacity of different doses of RT23 containing different stabilising agents.	1963
Bacteriology	61	Assessment of sputum examination carried out in selected microscopy centres of the Bangalore district programme over a 12 month period.	1963
Epidemiology	62	Tuberculin reaction in patients.	1963
Control	63	A direct BCG vaccination: Programme in Tiptur Taluk.	1963
Control	64	Observation of "regularity of treatment".	1963
Control	65	Pilot study on regularity of intermittent streptomycin cum isoniazid treatment.	1963
Control	66	Selection and referral of symptomatics for diagnosis of tuberculosis in the peripheral health and medical institutions.	1963
Control	67	Correlation between drug collection, drug consumption and clinical progress of the disease.	1963
Epidemiology	68	More intensified sputum examination.	1964
Control	69	Test runs of the district tuberculosis control programme.	1964
		Sub protocols:	
Control	69.1	Test runs - Chitradurga.	1964
Control	69.2	Test runs - south Canara.	1964
Control	69.3	Test runs - Shimoga.	1964
Sociology	70	Tuberculosis as a problem of suffering in a rural community (pilot study).	1964
Bacteriology	71	A comparison of cold staining with the conventional Ziehl-Neelson method.	1964
Control	72	Operational aspects and toxicity of INH and thiacetazone	1964

		in rural areas.	
Epidemiology	73	Longitudinal survey-III round-second follow up.	1964
Sociology	74	Evaluating tuberculosis as a health problem in a rural community.	1964
Control	75	Operations research of district tuberculosis programme.	1964
BCG	76	Evaluating methods for assessment of BCG vaccination without tuberculin tests.	1964
Epidemiology	77	The role of sputum examination of symptomatics in a survey.	1964
Epidemiology	78	Investigation on the prevalence of resistant strains in a rural community.	1965
Control	79	Operational and technical aspects of a systematic BCG vaccination among new borns in Bangalore city.	1965
Epidemiology	80	The fourth round of longitudinal survey (third follow up)	1965
Sociology	81	Behaviour of an urban population towards a TB diagnosis and treatment centre.	1965
BCG	82	Comparison of allergy inducing capacity of BCG vaccines produced from different strains in BCG vaccine laboratories at Madras and Copenhagen.	1966
Control	83	Knowledge, skills, aptitudes and extent of participation of health institution staff in TB control programme.	1966
Epidemiology	84	Comparison of tuberculin reactions with 20TU RT23 and Gause antigen.	1966
Control	85	Proportion of persons with symptoms suggestive of pulmonary tuberculosis visiting the OPD at government dispensaries in Bangalore city and among them proportion of patients with active pulmonary TB.	1966
Sociology	86	A sociological study of drug resistant cases under routine domiciliary treatment.	1966
Sociology	87	Changing pattern of patient population presenting for diagnosis at the LWTDTTC (Bangalore).	1966
Control	88	Technical assessment of the DTP (excluding its impact on the problem of tuberculosis in the community).	1966
Epidemiology	89	Estimation of drug resistance in general population	1966

		in area of longitudinal survey (by history taking).	
Epidemiology	90	Re-survey of 30 treated villages.	1966
Bacteriology	91	Variation in examination of positive sputum specimens by direct microscopy.	1967
Control	92	Concurrent small pox and BCG vaccination.	1967
BCG	93	Comparison of post-vaccination allergy induced by vaccination with dermojet gun and intradermal methods.	1967
Control	94	Knowledge, attitude and skills of staff of peripheral health institution participating in DTP and the role of key personnel of DTC in influencing the peripheral staff.	1968
Control	95	Detailed study of treatment aspects from sample material of Lady Willingdon Tuberculosis Demonstration & Training Centre, Bangalore.	1968
Epidemiology	96	Estimation of the prevalence of symptomatics in general population and cases among them.	1968
Epidemiology	97	Comparison of 5 year follow up in 14 villages.	1968
Control	98	Acceptability of intermittent chemotherapy with biweekly streptomycin in INH in urban Bangalore	1968
Control	99	Assessment of training in NTI	1968
Bacteriology	100	Cold staining method for differentiating mycobacterium tuberculosis and other acid fast bacilli.	1968
Control	101	Estimation of incidence of tuberculous disease and follow up of cases, suspects and other X-ray abnormalities at shorter intervals in the rural community.	1968
Control	102	Assessment of NTI training within job environment	1969
Epidemiology	103	Estimation of more precise prevalence of bacteriologically confirmed disease in general population.	1968
Control	104	Provision of second X-ray referral centre in a DTP.	1968
BCG	105	Influence of temperature and duration of storage on the viability and the sensitizing capacity of freeze dried BCG vaccine the ampoules of which are sealed in vacuum or with nitrogen	1968
BCG	106	BCG vaccination on coverage of (6-15 years) population	1969

		under a school vaccination programme	
Statistics	107	Test runs of revised records and reports in District Tuberculosis Programme.	1969
Statistics	108	Integrated recording and reporting under the DTP and general health services.	1969
Control	109	Development of DTPs in southern India by PERT-CPM network.	1969
Control	110	Methodology of integration of BCG vaccination in general health services.	1970
Control	111	Relationship between prevalence of symptoms (sickness) in the population and attendance at the area PHC.	1970
Sociology	112	A pilot study of sociological background of TB patient and its significance in his treatment.	1970
Control	113	Organizations and technical variations in the formulation of case finding at the PHI's in a DTP.	1971
Control	114	Long term observation of District Tuberculosis Programme (Master protocol).	1971
Control	115	Comparative efficacy of different techniques of BCG vaccination.	1972
Bacteriology	116	Stainability of tubercle bacilli with different brands of basic fuchsin.	1972
Control	117	A five year follow up study of patients intake in RP/98.	1972
		Sub protocols:	
Epidemiology	118	a)Repeat epidemiological survey (to compare the infection and disease).	1972
Sociology	119	b)Awareness and action taking of persons with pulmonary tuberculosis of 62 villages and 4 town blocks of Tumkur district, following epidemiological survey.	1972
Epidemiology	120	c)Problem of prevalence of tuberculosis among population around 2 miles and around health institutions.	1972
Control	121	Influence of periodical motivation of tuberculosis patients and their families/household members in the regularity of drug collection.	1973
Sociology	122	A sociological follow up of tuberculosis patients	1978

diagnosed and treated at the Lady Willingdon TB Demonstration & Training Centre in the year 1961.

Bacteriology	123	Comparison of conventional ZN method of staining with and without alcohol decolourisation and staining by Gabbets methylene blue.	1973	
Control	124	A controlled study of specific treatment on the bacteriological status of suspect cases.	1973	
Epidemiology	125	Changes in tuberculosis infection rates between two points of time and prevalence of non-specific sensitivity in the rural community.	1973	
Epidemiology	126	Estimation of prevalence of chest diseases other than pulmonary tuberculosis in an urban community and prevalence and incidence of clinical tuberculosis in the 0-4 years age group.	1974	
Control	127	Acceptability of BCG vaccination in mass BCG campaign programme.	1974	
Control	128	Estimation of additional yield of tuberculosis cases through examination of 8 sputum specimens among symptomatics.	1974	
Bacteriology	129	Evaluation of smears prepared in different ways.	1975	
BCG	130	Alternate method to read the tuberculin reactions.	1975	
Sociology	131	Awareness of the tuberculosis programme among the primary health centre personnel.	1976	
Control	132	Health practices of rural community and utilization of area PHC by them.	1976	
BCG	133	Administration of BCG vaccination by multi puncture method.	1976	
Bacteriology	134	Pilot study on some bacteriological aspects among patients attending, Lady Willingdon TB Demonstration & Training Centre Bangalore.	1976	
222	BCG	135	Use of local reaction at the site of BCG vaccination for surveillance.	1976
Sociology	136	Morbidity and medical relief in rural households.	1976	
Epidemiology	137	Repeat epidemiological survey in a rural population of south India. Fourth follow up study.	1977	

Sociology	138	Action taking of tuberculosis cases detected in fourth follow up epidemiological survey in a rural population in south India	1977
Statistics	139	Trend in case finding in District Tuberculosis Programme.	1977
Statistics	140	Communication between primary health centres and District Health Offices.	1977
Statistics	141	Records and reports of general health services.	1977
Bacteriology	142	Preliminary study to investigate the influence of coconut water on the growth of tubercle bacilli.	1977
Control	143	Influence of 'initial motivation' on drug collection of tuberculosis patients.	1977
X-ray	144	Use of computer technology for developing pseudo colour rendition of chest X-rays to improve training in X-ray reading.	1978
Control	145	Feasibility of the involvement of multipurpose workers in case finding in DTP.	1978
Control	146	Short course chemotherapy: Study in Bangalore.	1978
Bacteriology	147	Comparison of results of homogenization and decontamination of sputum specimens with different volumes of sodium hydroxide.	1978
Sociology	148	A concurrent study of social problems of patients on short course chemotherapy.	1978
Control	149	Some operational aspects in improving case finding by microscopy in peripheral health institutions.	1979
Bacteriology	150	Some methods to improve case finding by microscopy in pulmonary tuberculosis.	1979
Epidemiology	151	Changes of tuberculosis infection rates in a rural community in Bangalore district after a period of 5 years.	1979
Epidemiology	152	An epidemiological survey in a rural population of south India to study the prevalence (and incidence) of infection.	1979
Control	153	Organisational efforts in a short course chemotherapy trial - a concurrent study.	1980
Sociology	154	Intermittent short course chemotherapy study for pulmonary tuberculosis in Bangalore.	1980
Sociology	155	Utilisation of treatment facilities by tuberculosis patients	1980

and their households in an urban area

Sociology	156	Utilisation of treatment facilities by tuberculosis patients initiated on treatment at Lady Willingdon tuberculosis demonstration and training centre and their households in metropolitan Bangalore.	1980
Control	157	Feasibility of the involvement of multi purpose workers in improving case finding and case holding under DTP.	1981
Sociology	158	Tuberculosis services as a component of health care offered by multi purpose workers.	1983
Bacteriology	159	Study to differentiate viable tubercle bacilli from dead ones in sputum smears by staining.	1982
Control	160	Applicability of two drug regimens of short course chemotherapy under operational conditions of a District Tuberculosis Centre.	1981
Sociology	161	Procedures to improve consciousness of community in respect of tuberculosis services.	1982
Bacteriology	162	Virulence of M.tuberculosis isolated in Bangalore area.	1983
Epidemiology	163	A longitudinal survey of tuberculosis in a rural population in south India.	1984
Epidemiology	164	The surveillance of tuberculosis through cheaper epidemiological tools.	1983
Sociology	165	A bench mark survey of two districts of Tamil Nadu.	1983
Bacteriology	166	Behaviour of M.tb of low virulence on animal passage.	1984
Control	167	Applicability of a drug regimen of short course chemotherapy under operational conditions of a district tuberculosis centre.	1984
Control	168	Applicability of a drug regimen of short course chemotherapy under operational conditions in PHI's under DTP.	1985
Control	169	Feasibility of distribution of drugs to tuberculosis patients by "multi purpose health workers".	1985
Bacteriology	170	Recovery of tubercle bacilli from urine and potential	1985

		contribution of virulence in haematogenous forms of tuberculosis.	
Control	171	Effect of referral of out patients for periodic sputum camps organised at PHIs.	1985
Control	172	Demonstration of district tuberculosis programme (an action cum research project).	1986
Epidemiology	173	Estimation of prevalence of chest symptoms and bacillary tuberculosis in a community to form a basis for surveillance of NTP.	1986
Control	174	Potential of high dose INH and streptomycin biweekly in the treatment of isoniazid resistant tuberculosis under conditions of the urban tuberculosis programme.	1986
Bacteriology	175	Role of mycobacteria other than M. tuberculosis in immunization against tuberculosis.	1987
Bacteriology	176	Haematogenous dissemination of tubercle bacilli in guinea pigs and its predictive value for pathogenesis of human tuberculosis.	1987
Bacteriology	177	Screening fresh isolates of M. tuberculosis for homogeneity in virulence, morphology and pigmentation of colonies.	1987
Bacteriology	178	Serodiagnosis of pulmonary tuberculosis by Kaolin agglutination technique.	1987
Control	179	Applicability and efficacy of an 8 month regimen of short course chemotherapy under field conditions of district tuberculosis programme..	1988
Epidemiology	180	Efficacy of BCG vaccination among children 0-4 years.	1988
Sociology	181	A sociological study of default among rural tuberculosis patients	1988
Bacteriology	182	Use of trisodium phosphate and cetyl pyridium chloride (CPC) as transport media for sputum specimen in isolation of mycobacterium tuberculosis.	1988
Bacteriology	183	Serodiagnosis of pulmonary tuberculosis by enzyme linked immunosorbent assay (ELISA) and passive haemagglutination tests.	1989
Bacteriology	184	Serodiagnosis of extra pulmonary tuberculosis by ELISA and passive haemagglutination (PHA) tests.	1988

Control	185	The fate of patients of pulmonary tuberculosis lost from treatment under short course chemotherapy or conventional regimens in an urban TB centre functioning under the DTP.	1989
Epidemiology	186	Tools of tuberculosis surveillance: tuberculosis in children and fate of tuberculosis cases.	1990
Bacteriology	187	Effect of 10% carbondioxide on the primary isolation of mycobacteria.	1990
Bacteriology	188	Biological characteristics of M.tuberculosis isolated from urine and corresponding sputum specimen in a series of patients with pulmonary tuberculosis.	1990
Bacteriology	189	Sero-epidemiology of tuberculosis in children aged 0-14 years in areas around Bangalore.	1990
Bacteriology	190	Evaluation of cold staining methods for acid fast bacilli using various easily available detergents and candle flame.	1990
Bacteriology	191	Evaluation of culture methods using N-Acetyl-L-Cysteine and 2% sodium hydroxide and 7H10 - agar based culture medium.	1990
Bacteriology	192	Isolation of environmental mycobacteria from soil and water.	1990
Control	193	The fate of patients of pulmonary tuberculosis lost from treatment under programme conditions in a south Indian district.	1990
Sociology	194	Evolution of chest symptoms and action taking pattern among cases and suspects over a period of time.	1990
Control	195	Tuberculosis case content among self-reporting chest symptomatics at peripheral health institutions - potential and performance.	1991
Control	196	Efficiency of alternative methods of delivery of supervised ambulatory short course chemotherapy in District Tuberculosis Programme	1993
Sociology	197	Profile of Dais (traditional birth attendants) and anganwadi workers.	1993
Epidemiology	198	Estimation of protective effect of BCG among children aged 0-14 years: a retrospective case control study.	1994
Epidemiology	199	Annual risk of infection of tuberculosis in urban areas -	1995

		a pilot study among school children.	
Sociology	200	Case-finding process in tuberculosis control.	1996
Control	201	Follow up study of pulmonary tuberculosis patients treated with short course chemotherapy through alternate drug delivery method.	1996
Epidemiology	202	Preliminary study of incidence of infection among BCG vaccinated and unvaccinated children in a peri-urban area adopting the technique of differences in reactions.	1996
Bacteriology	203	Assessment of the trisodium phosphate - penicillin transport medium and single step method of culture.	1997
Control	204	Assessment of anti TB treatment rendered by various health care providers.	1997
Control	205	Profile of TB patients and reasons for their non-compliant behaviour in a rural set up under DTP - A cohort study.	1997
Epidemiology	206	A national sample survey to estimate annual risk of tuberculosis infection in India.	1998
Epidemiology	207	Comparative assay between the tuberculins 1TU & 2TU RT23 with tween 80.	1998
Bacteriology	208	Surveillance of drug resistance in Mysore district.	1998
Control	209	Status of pulmonary tuberculosis patients put on treatment under Revised National Tuberculosis Control Programme, Bangalore Mahanagara Palike.	1998
Control	210	Treatment outcome of smear positive pulmonary tuberculosis patients in Revised National Tuberculosis Control Programme – A prospective study.	1999