之》的为共和国医療協力 美施調查豆穀告書

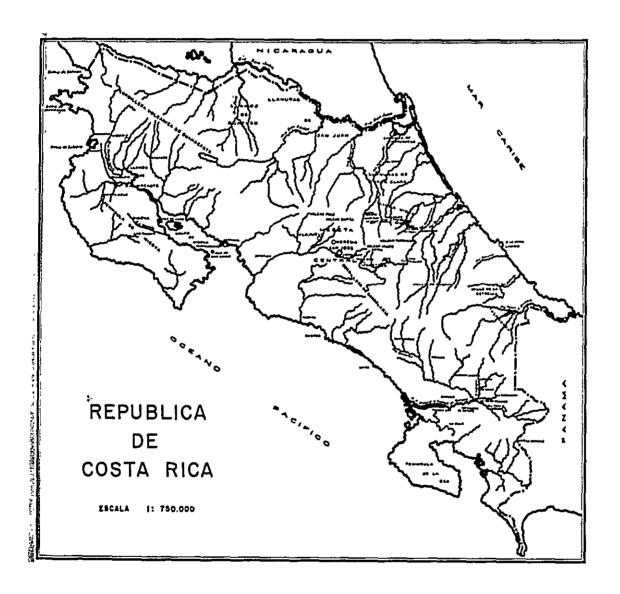
JIGA LIBRARY

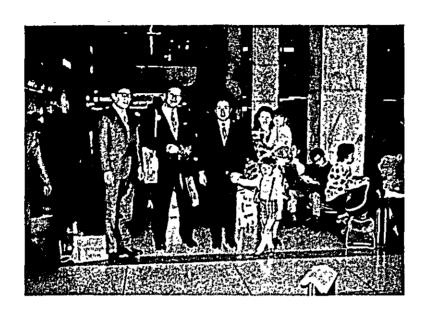
100045107

コスタリカ共和国医療協力 実施調査団報告書

昭和49年2月

海外技術協力事業団
Overseas Technical Cooperation Agency
(O.T.C.A.)





いざ出発し羽田にて、たから隅田団員、深井団 長。山田団員。山田先生夫人と御子息)

Donan a Universidad microscopio gigante

Un microscopio electrónico, el Un microscopio electrónico, el primero en Centroamérica, será obsequiedo hy por el Gobierno de Japon a la Universidad de Costa Rica, una vez que los dos países fermen un convenio de asistencia técnica cuyo propósito es el estímulo de las terneias biomedicas en el país.

MISION JAPONESA

Para completar la redacción del converio y la formalización del obseguio, ha llegado al pais una misión científica que integron los écetores Konosukue Fukai, de la Unive sidad de Osaka, Takeshi Yamada, de la Universidad de Guana y Erro Sumida, de la Astroia de Croperación del Japen.

Los tres funcionatios y miembros de la Embajada de ese país en San José, se darán elta hey a las 4 de la tarde en la cancillería para la lectura y fuma del conveno gobiernogron los coctores Konosukue Fu-

gobierno que expeditá la dona-ción del microscopio y la ten-lización de un vasto programa de asistencia técnica e inter-cambio de científicos entre las dos naciones.

MICROSCOPIO

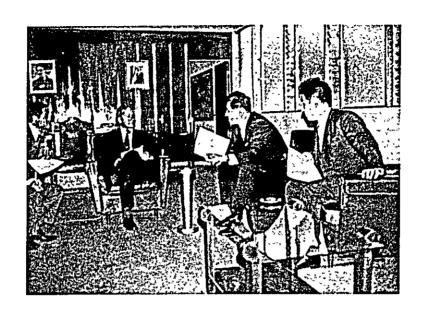
El aparato, cuyo valor se estima en un millon de colones, es de último modelo y será instaledo en el edificio de la facultad de Medicina, pero con el fin de que sirva a todos los mestigadores de ciencias biomédicas Llegará al país aproximadamente en marzo próximo y antes de su instalación se tienen que horer una serie mo y antes de su instalación se tienen que horer una serie de estudies sobre vibrar én de la tierra, humedad del ambiente y otros detalles, pues retircta de un equipo sumamente delicado y valioso El aparato es de lo más moderno que existence de agrando de la contro del contro de la contro del la contro del la contro del la contro de la contro de la contro del la contro de la contro de la contro de la contro de la cont te en el campo de los microbios y funciona mediante rayes ultravioleta y ermpos electromag-nétices. Tiene una posibilidad de aumento mayor a las 100 000 veces.

CONVENIO

Pero el convenio no com-prende ún.camente esta dona-ción, incluye también una bue-na cantidad de equipos meno-res para investigación y un programa de entrenamiento pa-ra personal costarricense que se dará en San José y tam-bién en Japón Vendrá un ex-perto de ese país para adies-tiar a los nacionales en el ma-nejo del equipo y también hanejo del equipo y también ha-brá intercambio de experiencias o personal cutre las universida-des de Japon y Costa Rica.

El licenciado Eugenio Rodrícuez, rector de la institución, firmará también el convenio junto con las autoridades gu-bernamentales.

調査団のコスタリカ来訪を報じる現地の新聞 (昭和48年11月2日 LA NACION)



GAMEZ 文部大点表数訪問(大臣紹にて、 だより哲學さか等、採井歴長、由田田))



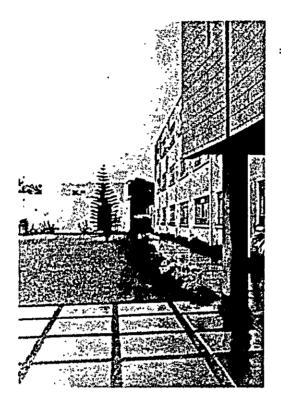
ぎなんに張けるR/Dについての会議



R/D打合せ中のコスタリカ大学 RODRIGUEZ 学長と深井団長(大学学長室にて)



同じく、コスタリカ大学MORERA 教授(O.T.C.A 研修員)と由田伊員(後向き)。MORERA 教授に は、コスタリカ帝在中、随分が世話になった。



コスタリカ大学医学部外景



電子顕微鏡設置候補地(コスタリカ大学 メインキャンパス。 正面は医学部)



SAN JUAN DE DIOS HOSPITAL (SAN JOSE 市の中心にある)

PUNTARENAS 毒全量 (電子顕微鏡の荷揚げ礁)



PUNTARENAS 准



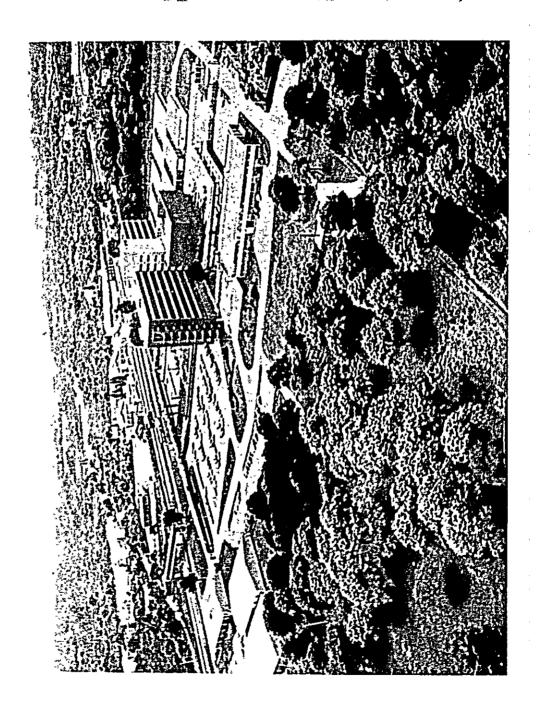
典型的なコンタリカ 美人(絵葉書より)



R/D 調印式の模様を報じる新開報道~LA NACION(48.11.3) (左より、傑井団長、FACIO外務大臣、RODRIGUEZ 学長、外務省黄金の間にて)



El gobierno de Japón donó un microscopio elecírónico, que funcionará en la Facultad de Medicina de nuestra Universidad. Está valorado en un millón de colones y llegará al país en marzo. Este es el momento en que se firmaba ayer en la cancillería un convenio para su uso. En el orden acostumbrado están: Tetsaburo Hitomi, embajador de Japón: Lic. Gonzalo J. Facio, Ministro de Relaciones Exteriores: Lic. Eugenio Rodríguez Vega, rector de la Universidad y Lic. Fernando Salazar Navarrete, Viceministro de Relaciones Exteriores. - (Roa).



の何院にひけをとらない立派なものであった。)今後(さすが。何院の国。だけあって日本の道一流コスタリカ国随一の規模と設備を誇るメキシコ科院

目 次

	Ü
は し が き	
海 在 団 編 成	3
調 齐 日 程 表	3
調査団の派遣経維・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	13
コスタリカ政府関係当局との交渉経過	29
RECORD OF DISCUSSIONS 他 ······	49
コスタリカの一般医療事情	79
医療協力実施調査団関係者リスト	93
関係参考资料	
1. 電子顕微鏡設置関係図面	99
2 GUIDE TO COSTA RICA	137
3. LIVING IN SAN JOSE	153
PUBLIC HEALTH AND HOUSING	175
4. 厚生省組織図	183
5 2 D (H)	184

はしがき

国際協調時代に於ける海外経済・技術協力は、最近著しく敵動する世界情勢の中で、政治的にも経済的にも様々な問題があり、その難かしさが増大している。

反而, 先進工業国の開発途上国に対する経済技術協力は, 日増しにその重要性と必要性が評価され、量的にも質的にも, そのあり方が国際的に耐職され再検討されている。

しかしながら技術協力は、経済協力に比し地味ではあるが国家間に於ける 政治的、経済的な面を越えて純粋に人と人とのふれ合いを通じて民族相互間 の理解増進に役立つもので、特に医療協力分野に於いては、人道的立場から の協力であり最も基本的かつ重要なものであると考えられる。

さて当事業団は、上の技術協力事業の一環として、このたびコスタリカ共和 国からの強い要請に基づき、同国に対し電子顕微鏡の供与と関連の基礎医学 及び船研究分野等の向上を計る為、コスタリカ大学医学部を中心に、医療協 力を行なう事になり、その実施調査の為、今般大阪大学微生物学研究所教授 探井考之助博士を団長とする3名からなる調査団を現地に派遣した。

本調査団は、昭和48年10月29日より11月12日までの15日間コスタリカ共和国に滞在し、上記プロジェクトについての具体的実施方法について、FIGUERES コスタリカ国大統領をはじめとする同国政府関係者と話し合いを行なった。本書はその報告を取りまとめたものである。

ここに、本調査の任にあたられた調査団長をはじめ団員の方々、並びに本調査団に種々調協力いただいた在コスタリカ日本大便館の人見大使閣下、前原一等書記官、外移省技術協力分二課樋口事務官及び関係諸機関の方々に対し、この機会をかりて深基なる謝意を表する次分である。

昭和49年2月

海外技術協力事業団理事長 田 付 景 一

調查団編成調查日程表



調查団編成

回 長 深 并 考之助
(大阪大学微生物学研究所教授)
回 負 山 田 彪 史
(群馬中央総合病院眼科)
団 員 岡 田 栄 亮
(海外技術協力事業団医療協力部医療分2課職員)

特別参加 樋 口 宏 氏 (アドバイザー) (外務省経済協力局技術協力分2課事務官)

調查日程表

月	B	行 動 日 程
10月2	7日(土)	PA-846 便にて東京出発, 国際日付変更線を
P M	2:35	越えSAN-FRANCISCO 経由にて、同日PM2
		:00 LOS-ANGELES空港に到着(LOS-
		ANGELES 泊)搭乗予定の翌日の10月28日
		(日)のPA-515便の機体故障及び他の適当
		な便がないため,再度Los Angeles に1泊。
10月2	9日(月)	
A M	9:45	PA-515便にてLos Angeles 出発
PM	7:40	San Jose 到着
		大便館より前原一等書記官,コスタリカ側より
		Dr. Dodolfo Cespedes コスタリカ大学医学部

		行 助 日 程
月		
		病理学教室主任教授、並びにDr. Pedro Morera
		コスタリカ大学微生物学部長出迎え。
PM 8:20~	11:30	人見大便主催歓迎パーティーに出席, 養蚕ミッシ
		ョン3名同席 (於 大使公邸)
PM11:50~	•	ホテル BALMORLに於て滞在中の日程等につき打
AM	00:40	合也。
10月30日	(火)	(1) 大便館表敬訪問
		人見大使並びに前原書記官に調査団の性格。
		目的, 並びにR/D の原案につき説明。
		調査等打合せ。
		(2) コヌタリカ側より大使館宛提出済の電子顕微
		鏡設備にともなう建物の設計図面検討。
		(3) Sra Wildo Quinones 外務省技術協力課長
		大使館来館, 周課長に調査団の性格, 目的, 日
		程並びに日本側作成のR/D の原案につき内容
		を説明。
PM03:00~	05:00	コスタリカ大学表敬訪問。
		Rodriguez学長,Trejos 評議会議長と会見,日
		本側作成のR/Dの原案を提示,内容を説明。
		(Morera 教授同席)
PM08:00~	10:00	ホテルBALMOLAL に於てMorera 教授と懇談。
1 0 月 3 1 日 (水)	
AM09:30~		厚生省表敬訪問。
		Orlich 厚生大臣、Valverde 衛生局長等と会見。
		日本側作成のR/Dの原案につき内容説明。
AM10:30~	11:30	文部名表敬訪問。
		C HE II SC SC SUI 11/10

Я В	行 助 日 程				
	Gamez 文部大臣と会見。				
	日本側作成のR/Dの原案につき内容説明。				
PM 3:30~ 4:10	San Jose 市郊外に在る日本からの進出企業日立				
	Sales Centro America を視察見学。				
PM 4:25~ 4:50	大所館に於て前原一等非記官と行動日程打合せ。				
PM 5:00~ 5:45	外務大臣表敬助問。				
	(前原一等背配官, Quaiones 外孙省技術協力課				
	長何席)				
PM 6:00~ 6:50	大統領官邸にAguilar 才一副大統領表敬訪問。				
PM 7:30	外務省経済協力局技術協力分二課頭口事務官 PA				
	- 515 便に て San Jose 到沿。				
1 1 月 1 日 (木)					
AM 9:30~	(1) コスタリカ大学医学部においてコスタリカ側				
PM12:30	電子顕微鏡調整委員会のメンバーとR/D協議				
	のための事前打合せ。				
	(2) コスタリカ大学医学部キャンパス内における				
	電子顕微鏡設置の適地4ヶ所調査実施。				
PM 3:00~ 5:30	大使館において、前原一等書記官に午前中の行動				
	内容につき報告並びに事務打合せ。				
PM 6:00~ 8:00	樋口事務官大使公邸に於て人見大使, 並びに前原				
	一等書記官と協力の具体的内容方針等につき打合				
	산。				
1 1 月 2 日 (金)					
AM 9:10~	Hospital San Juan de Dios 訪問。				
PM12:30	(1) Dr. Rodolfo Cespedes コスタリカ大学医学				
	部病理学教授主任教授、並びに Dr. Pedro				

Д В	行 動 日 程				
	Marera コスタリカ大学微生物学部長等の案内				
	で同地における電子顕微鏡設置の適地調査の実				
	施。(2ヶ所)				
	(2) 隣接小児病院の病理部内祝祭。				
	(3) Hospital San Juan de Dios の組織等調査。				
PM 4:00~ 4:20	外務省黄金の間において日本側深井団長, コスタリ				
	リカ側 Rodriquz コスタリカ大学学長との間にお				
	いて Record of Discussions の署名交換。				
	コスタリカ側からは外務大臣, 次官等8名, 日本				
	側からは人見大使、前原一等書配官等館員全員並				
	びに調査団員及び樋口事務官陪席。				
PM 4:40~ 6:10	樋口事務官並びに隅田団員大使館において削原一				
	等非記官と事務打合せ。				
PM 6:10~ 7:30	深井団長外調査団員大使館において人見大使に表				
	敬挨拶(人見大使が4日より中南米大使会議に出				
	席,不在となるため)				
11月3日(土)					
AM	· 資料等整理				
PM 3:00~ 6:00	コスタリカ関催子顕傲鋭調整委員会委員と懇談。				
1 1 月 4 日 (日)					
AM 8:00~	電子顕微鏡の锡陸の施設並びに港から San Jose				
PM 8:00	迄の道路状況視察, 調査のためブンタレナス港				
	(San Jos'e から片道約110 km)の往復。				
	コスタリカ側より Dr. Radolfo Cespedes , Dr.				
	Pedrce Moura, Dr. Balgaz 教授同行。				

<u></u>
行 助 日 程
Aguitar オー副大統領の招待により I razu 火山地
帯見学、大使館より前原一等排配官同行。
コスタリカ国の一般事情調査のための資料収集。
ホテルBALMORALに於て後半行動日程等につき
打合せ。
コスタリカ大学医学部会議室において、R/Dの
具体的内容につき討議。
コスタリカ側 Rodrigo Gutierrezコスタリカ大学
医学部長外4名の電子顕微鏡調整委員出席。日本
側, 深井団長, 山田, 隅田団員及び樋口事務官出
席。
(1) 深井団長、ホテルに於て電子顕微鏡の設位図
面の作成並びに電子顕微鏡設置に関連してのコ
スタリカ側に対する技術的アドヴァイスのため
のコスタリカ大学学長宛の書簡作成。
(2) 山田団員。一般医療事情の調査並びに資料収
集(コスタリカ大学医学部,厚生省関係)
(3) 樋口事務官並びに隅田団員コスタリカ一般事
情把握のための資料収集。
(1) 深井団長, 前日に引続き, 電子顕微鏡設置,
図面の作成, 並びに技術的アドヴァイスのため
コスタリカ大学々長宛書商作成。
(2) 山田団員, 前日に引続きHospital San Juan

月 日	行 助 日 程
PM 8:00	de Dinsを中心に一般医療事情の調査
AM 8:10~	(3) 樋口事務官並びに隅田団員、コスタリカの一
PM 2:3	0 殺事情把握のため資料収集(文部省・労働省・
	農林省)
PM 3:20~ 3:5	0 傾口事務官並びに隅田団員
	外 连省往訪, Sra Wildo Quinones 技術協力課長
	に日本からの派遣専門家の具体的を待遇内容等に
	つき確認, 並びに医療, 厚生面に対する外国援助
	の実情につき事情聴収。(前原一等徘記官同行)
PM 6:20~ 6:5	5 大統領私邸にFigueres 大統領表敬訪問。
	(大統領夫人, Aguilar 沙一副大統領, 前原一等
	沙記官同席)
PM 7:20~11:2	0 前原臨時代理大使主催の医療・養蚕・舞踊関係者
	招待パーティーに出席(於 大便公邸)
11月8日(木)	
AM 9:00~	(1) 山田, 隅田団員並びに樋口事務官, 寄生虫に
PM 7:0	0 関連しての地方の実情把握のためジーブにて
•	Parrita (プンタレナス州)往役。
	Dr. Rodolfo Cespedes 教授並びにDr. Pedro
	Morera 教授同行。
	(2) 採井団長、電子顕微鋭設置図面の作成作業,
	並びにコスタリカ大学 Rodrigez 学長訪問,電
	子顕敏鏡設置に関連の技術的アドヴァイスの書
	简手交説明。
11月9日(金)	
AM 9:00~	(1) 大使館に於て前原一等書記官と今後の医療協

月 日	行 奶 日 程
PM 8:00	力のあり方等につき事務打合せ。
	(2) 11月6日コスクリカ大学医学部会議室にお
	いて行われたコスタリカ側電子顕微鏡調整委員
	との協力の具体的内容等についての AI DE-
	MEMOIRE の作成(修正)作業。
PM 8:00~12:00	深井団長、電子顕微鏡設置図面の作成作業。
•	山田、隅田団員並びに樋口事務官資料等の整理。
1 1月10日(土)	
AM 8:00~	Hospital Mexico 訪問。
PM 1:00	Aguilar 才一副大統領(同副大統領は Hospital
	Mexico の外科部長をも兼任)並びに病院長等の
	案内で臨床検査,並びに病理部門を主体に祝祭・
	見学を行なうと共に同病院における電子顕微鏡の
	設置の適地調査の実施。
PM 1:00~ 6:00	深井団長,Hospital Mexico構内にかける,電子
	顕微鏡設置適地調査の結果につきコスタリカ大学
	総長宛アドヴァイスのための俳簡作成作業。
	山田,隅田団員並びに援口事務官コスタリカ大学
	医学部病理学教室関係者と 懇談。
PM 7:00~ 9:00	大使館に於て前原一等書記官に交渉結果報告及び
	調在団帰国挨拶。
11月11日(日)	
AM 9:00~12:00	コスタリカ大学徴生物学部部長Morera 教授に寄
	生虫研究計画につき事情聴取。
PM 2:00~ 3:00	コスタリカ側に磁束計使用方法について説明。
PM 4:00~ 6:00	コスタリカ大学医学部病理学主任教授 Dr. Cespe

月	日	行	坳	日	程	
		des から英熱族	5学の資料	科受領。	•	
PM 7:00~	8:00	帰国後のスケシ	; ュール	打合せ。	,	
		調査資料の整理	1. 検討。	,		
11月12日	(月)					
AM 8	: 25	PA-542 にて San Jose 出発				
AM12	: 50	Mexico 到滑	Mexico 到帝 (泊)			
		Mexico 発1 1	月13日	3(火)	AM10:30	Ø
11月14日	(水)	JAL-011便	にて帰り	E		
PM 7	: 4 0	羽田到珩				
		: 				
		:				
-		l				

調査団の派遣経緯



調査団の派進経緯

コスタリカ この名前をお聞きになっても、この国がどこにあり、どの ような人々が生活を営んでいるのかという事を正確に言いあてられる人は、 皆無と言っても過言ではないであろう。

それどころか、国名とは知らずに、新しく出版された百科辞典の名前?と 質問されるに及んでは、いささか失望の念を隠し切れない。

この程さように、日本とは殆んどなじみのない国ではあるがCosta(海岸) Rica(豊かな)という美しい名前を持つこの国は、北をニカラグア、南をパナマの両国と国境を接し、又、東西をそれぞれカリブ海と太平洋に面した。日本の四国と九州を合たせたよりも、いくらか小さい面積(50,700 km²)と約200万人(1973年)の人口を有する誇り高い庭とした共和国であり、中央アメリカ5ケ国(グアテマラ・ホンジュラス・エルサルバドル・ニカラグア・コスタリカ)唯一の人種差別のない民主的な白人国家でもある。首都はSan Jose市で、人口 均40万人弱、標高1200~1300メートルの高原にあるため、夜間はやや冷え込むが気温は平均22~23度と涼しく極めて快適。

気候は雨季、乾季の2シーズンに分けられ、雨季は5~10月、乾季は11~4月。南ヴェトナムと同称度の北維10度の熱帯にあるので、果樹の種類も、マンゴ、パパイヤ、パナナ(チキータパナナとして日本に輸出されている)メロン、それにコーヒーと豊富だし極めて美味。又野菜の種類も豊富で果物・野菜とも値段も格安………。

教育水準も高く、文盲率はわずか8多、義務教育年限は日本と同じように小学校6年、中学校3年の計9年、大学生の数は1973年で23.656人で(コスタリカ政府文部省1973年資料)国民約10人に1人の割合で教育重視の国、そして今は病院の国で国家予算の30多を教育・文化に使ってかり、別掲写真のメキシコ病院の如き、日本でも殆んど見られない様な超一流の設

備とスタッフを持った大規模な病院(ベッド数800 床)が各地で続々と建設されつつある。又、生活環境も良く、風土病も他の熱帯地方に比べて、比較的少なく、政治的にも中米諸国の中では、安定してかり、極めて親日的で、在コスタリカ邦人も120名を数える状況である。軽工業も発達してかり、商品の数も豊富、更に中産階級も多く、所得水準は中米5ヶ国で最高である。経済はコーヒー、バナナ等、農産物を中心とした典型的なモノカルチュア経済で現在、工業化を進めている状態であるが、全般的には先進開発途上国と言っても差しつかえないであろう。更に輸出は、バナナ、コーヒー、ココア等の才一次産品で輸出総額の80~90多をしめている。

又、Institute Costarreense de Turismo (コスタリカ政府観光局、通称IUT) によればコスタリカは、その美しい風景自然と相まって観光資源も豊富で、中米のスイス、アメリカのJARDIN (楽園)と言う事であり観光客(ほとんどアメリカ人)も最近では急増しており、時々日本人グループの観光客もこの国を訪ずれると言う事であった。

ところで、我々調査団は、何もここでコスタリカ政府観光局にかわって、コスタリカの紹介をやらかそうという訳ではないが、我々日本人に、ほとんどなじみのない国、コスタリカのアウトラインを知って頂きたく、本筋の報告に先立って、一寸紙面をお借りした次分である。事情御賢察の上、諸賢のお許しを願いたい。

さて、我々は、かような国コスタリカに、中央アメリカ5ヶ国にとっては、初めての医療協力実施調査団のメンバーとして、15日間にわたって、訪問した訳であるが、この間、FIGUERESコスタリカ国大統領、AGUILAR

ツー副大統領を始めとするコスタリカ側関係者と一連の協議をもったが、国立コスタリカ大学に同国にとって最初の電子顕微鏡 —— 中米5ヶ国にとっても

股初──を供与し、向こう3ヶ年間、技術協力ペースの医療協力を実施する 為の事前調査を行い、日本側の今後の方針を明確に位置づけると言う、調査 団に課せられた所期の目的を曲がりなりにも達したのではないかと、自負 している次分である。

以下は、コスタリカ国にとって、医療協力分野における日本側の最初のプロジェクトペースの調査団の派遣に係わる直接の経緯である。

コスタリカ国政府は、同国唯一の総合大学で あるコスタリカ大学医学部及 び附属研究所における熱帯病々源、寄生虫等の医学研究、更に微生物学部・ 農学部の教授達の実験・研究の用に供せんとして、昭和46年(1971年) 3月15日付同国政府AGUILAR オー副大統領(医者・ノキシコ病院外科 部長)の書簡を以って日本にむける電子顕微鏡が世界的に模めて優秀である 事を指摘した上で、日本製電子顕微鏡の寄贈方について考慮願いたい旨、在 コスタリカ日本大使に正式に申し入れを行なった。これに対して我国は, 本年度予算(昭和46年度)では不可能である為、供与するとしても、明 年度以降の予算と言う事になるが、我方の技術協力関係予算による樹材供与 は、人との結びつきのない単なる商品援助的機材供与は行わない事を建前と しており、従って医療協力も相手国に高度の知識や経験を有する専門家を派 遺し、相手国の医学、医療水準の向上に、役立つ教育、訓練、研究等に対し て協力する事を目的としており、電子顕微鏡の供与も、その為の一手段とし て考えている。そして更に、我国で研修を受けて帰国した研修員によって その後、長期間にわたって有効に活用される事が、絶対に必要不可欠な条件 である。従って,日本側が医療協力事業として,コスタリカ大学に対する電 子顕微鏡の供与の可能性を検討する場合,

左記の日本人専門家の派遣,コスタリカ人研修員の受け入れ,日本での研修,更には電子顕微鏡の取り扱いに必要な技術レベルの程度,設置建物及び付帯設備(電気,水道,ガス等)、ランニングコストの確保の問題等事前に解決しなければならない諸問題があるが、まずオーに日本側としては、コスタリカ国が、我国より供与されん事を期待している電子顕微鏡を利用して行なわんとする医学、医療上の教育、ないし研究の分野、目的、及び利用計画を把握したい旨、コスタリカ側に意見の確認を求めた。その結果、上記の点に付き、我が方は、コスタリカ国 AGUILAR オー副大統領の返衛(昭和46年8月24日付)により。

- ① 本件機材は、コスタリカ大学医学部附属研究所に備え付け、医学、生物学、化学、農学、工学、鉱物学、各分野における調査研究に多目的に利用したい。
- ② 当国のみの利用ではなく、中米諸国の微生物学者の利用にも供する 予定である。
- ③ 純医学研究及び臨床面では、内科一般についての利用に供する事も考 えている。(ギテレスコスタリカ大学医学部長)
- ④ ウィルスの実態把握に電子顕微鏡の果たす役割は大きい。先般、ロックフェラー財団より中米のウィールス研究の為として、コスタリカ大学に24,000ドルの器材購入資金の寄贈があったが、電子顕微鏡がたい為充分な研究・調査が出来ない。購入済の器材を電子顕微鏡と補完的に利用すれば更に効果は極めて大であり、その意味で是非とも必要である(コスタリカ大学農学部ウィールス実験室長ガノス教授のコメント)
- ⑤ 本件については、フィグレス大統領も御承知である。 との概ね上記要旨での回答に接した。しかしコスタリカ側の上記回答はなお、 具体性に乏しく、その意図するところがやはり明確でない為、再変、意見

の確認を求めた結果、コスクリカ国外務省及びコスクリカ大学医学部関係者 よりの下記内容による意向が日本側に表明された。

- ① まず医学分野では、主として基礎医学而と舶研究面に利用する計画であり。
 - ① 基礎医学面においては、生体学、病理学の一般的カイダンスとの関連における電子顕微鏡の利用、つまり細胞構造や細胞分裂の観察、 病原体拡大写真の作成及び分類等の実習。
 - 回 新研究(特に円ガンの研究)面においては、従来のX線検査、試験的開腹、腫瘍触診等の方法から、ガストロ・カノラ及び、ガストロファイパースコープの使用による胃癌の早期発見が行われているが、しかし、胃液洗過物の高性能顕微鏡による検査を以って癌細胞の存在をつきとめる方法は、まだ当国には普及していない。そこで高性能型電子顕微鏡の供与が受けられれば、電子顕微鏡と補助的光学器具を結びつけての研究を行い、併せて胃癌の早期発見に成功している我国の技術指導をあおぎたい。
- ② 医学以外の分野

医学以外の分野では、農学部門(米州機構設立の農菜科学研究所を中心)に電子顕微鏡を活用する事を一応考えてはいるが、日本側と協議の上決定をみたい。

又,技術指導の形式としては、本件の如き高価を機材の供与にあたっては、 人との結びつきが必須条件である事は、当国政府及びコスタリカ大学側でも十分に承知している。ついては、機材の据付及び標本作成等の専門家を含め日本人専門家の派遣を願い、①基礎医学の場合には、コスタリカ大学医学部にて講座を受け持ってもらう。回癌研究の場合には、同大学又は然るべき国立病院にてインターン生の研究指導を行なってもらう予定である。 専門家の待遇及び滞在期間等については、予算措置とも関連があるが、現在鋭意検討中である。ついては、本件実現方に格別の御配慮方お願い致し たい。と言う事であった。そして更に我が方大使も「コスタリカ国の医学水 準,研究体制ないし医療の社会的位置付けは,我が方よりの機材及び専門 家の受け入れに適しい」とのコメントを特にそえてきた。

その後、コスタリカ政府は、昭和47年5月31日 AGUILAR 沙一副大統領の伝言として、電子顕微鏡の供与方について、我が方の好意に期待をかけている旨連絡越すると共に、更に昭和48年3月1日、日本大使に対し、「本件機材供与の早期実現を希望する。又、当国政府としては、本件機材供与の受け入れの為準備万端整えた心算であるが、機材の備え付けやその効果的利用の面で、日本側の専門家に指導をお願いせずばなるまいと考えている。」とのコスタリカ側の事情説明があり、日本政府への取りなし方を辞を低くして懇請してきた。

ことことに至り、我が方もかくの如く盛り上がったコスタリカ側の気運, 熱烈なる意向に答うべく, 鋭意検討した結果.

- ① 本件電子顕微鏡機材供与予算は、昭和48年度技術協力予算中、医協協力予算機材供与費に含め、その実施方予定している。
- ② 電子顕微鏡の供与実施の時期は,調査団派遺後となる。(注一時期は 未定,なか,納品にはOTCA正式発注後,最低3ヶ月間を要す)
- ③ コスタリカ側より、電子顕微鏡を利用しての教育対象分野を基礎医学及び癌研究分野であるとの回答に接しているが、その他、協力対象機関(本件の場合、コスタリカ大学医学部附属研究所が予定されているが)、協力機関、協力方法(協力対象分野に基く専門家の派遣、研修員の受け入れ、機材の供与等)、我が方派遣専門家に対する待遇措置(特権 免除等)等につき先方関係者と協議を行なう為、協力実施調査団の派遣を予定している。(時期は、未定なるも一応昭和48年7~8月頃の予定。)

との概ね上記内容での決定をみるに至り,コスタリカ側に通報した。 以上の諸経緯をもとに,コスタリカ側は,昭和48年6月12日付外菸省口 上書を下記趣旨にて我が方に提出越した。

- ① 木件機材は、医学分野の調査と臨床、及び生物学と農学分野の調査に利用する他、前配三分野の修士、博士コースの講座(実習)並びにコスタリカ大学在校生の教材作成(注ーたとえば船細胞拡大写真の作成等)にも利用する。
- ② 木件機材の受入機関は、コスタリカ大学である。しかし国立病院及び 農事試験所の利用にも供せられる。(注一医学利用を勿論、最優先さ せるが、余裕があれば医学分野以外の徴生物調査にも利用する、との 取旨である。
- ③ 本件に関連し、コスタリカ大学より、専門家を研修の為我国に派遣 する他、日本側専門家を招く用意がある。
- ④ 電子顕微鏡オペレータ養成の為定期講習を行うが、この関連で日本より講師招へいを行う事もありうる。
- ⑤ 日本側専門家の受入に際しては、最大限の便宜供与を行うが、委細は 調査団と協議の上決定いたしたい。
- ⑥ 機材引き取りに際しては、報道関係者を混え贈呈式を行う。
- ⑦ しかし、本件諸事項に係る最終決定は、日本政府派遣専門家(注ー調査 団の意)の勧告なり指示なりに従う方針である。

そして、更に、8月9日コスタリカ外務省ファシオ外相は日本大使に対して「日本政府の本件実現方の種々の御配慮に感謝している。ついては、該に身勝手ではあるが、当国政府 AGUILARオー副大統領は、コスタリカ大学新学期開講準備との関係もあり、遅くとも、翌年1月末日までには電子顕微鏡の備え付けに着手したいとの意向であるので、この点をテークノート願いたい。」旨認請した。

これらの経緯を踏まえて、我が方も8月中に調査団派遣(その後、9月上旬、 機材発注12月上旬船積、1月中旬ブンタレナス港到着引き取り)のスケジ ュールにて取り進めるべく、鋭意実施方につき努力を試みたが、調査団 派遣予算の承認行為が大幅に遅延したこともあってコスタリカ側の希望に応じかねる状況となり、本件の成り行きを憂慮していたが、9月に入り予算の承認があったため、スケジュールに若干の遅れはあったものの本格的なスタートを切る事になり、昭和48年9月21日大阪大学関係者、厚生省と外務省を交え、木プロジェクトに対する我が方の基本方針について協議するまでに至り、概ね下記のような日本側方針が打ち出された。そして又、同時に調査団派遣前に更に明確にすべき事項につき再度、コスタリカ側に問い合わせを行うべく決定をみた。

(4) 日本側の基本方針

- ① 調査団の派遣は10月18日出発とする(後に10月27日に変更)
- ② コスタリカ国に対する協力対象機関はコスタリカ大学医学部とし、協力範囲も医学関係(基礎医学及び新研究等)のみに主として限定する。
- ③ 協力期間は昭和48年度に始まる3ヶ年間とする。
- ④ 我が方の協力方式としては、電子顕微鏡の供与のみに重点をおくのではなく、電子顕微鏡を使用しての最も効果的な基礎研究及び教育指導が行なわれる部門特に病理学、解部学、微生物学等に重点をおいた方向でとり進める。
- ⑤ 研修員の受入

まず、オー年度に、電子顕微鏡使用に関する Technical Staff 及び Academic Staff 各1名を、昭和49年2月頃より数ヶ月間程 度受け入れる用意がある。

⑥ 磁材の供与

機材はオー年度に電子顕函鏡を主体に供与、当初予算(48年度分)は一応輸送費を含めて、2,700万円(後に3,000万円に変更)以内とし、次年度より必要に応じ、上記協力部門に関する関

・ 連機材を加えて行く。電子顕微鏡及び関連附属機器は上記研修員 の研修状況及び帰国時期等とにちみ合わせ供与する予定である。 (木邦港よりの船積みは、3月下旬を予定)

⑦ 専門家の派遣

上記研修りの帰国及び機材の現地者の時期をにちみ合わせまず2 名の専門家(電子顕微鏡据付技師及び操作技術者各1名,2ヶ月 程度)を派置する。その後前項の協力部門に関連するAcademic な専門家(複数)の派置方については、コスタリカ大学との協議 の上、決定する

⑧ 要請書の提出

上記3項目については、我が方中南米計画によるA」(専門家派 造)A2・A3(研修員受け入れ)及びA。(機材供与)フォームの コスタリカ政府よりの提出が必要である。

(※専門家派遣期間,員数並びに研修員受入期間,員数更に供与機材の機種・内容等については、オー段階のみの決定にとどめ、その後については、必要に応じ適宜検討を加えてゆく方針)

- (ロ) コスタリカ側への問い合せ事項
 - ① 具体的な管理責任部所
 - ② 電子顕微鏡の操作経験者の有無
 - ③ 電子類微鏡の設置場所と予算面の問題
 - ④ 電子顕微鏡設置場所等のスペース
 - ⑤ ランニングコストの有無

この5項目の問い合わせに対して本件調査団は,出発前に即座にコスタリカ側より下記要旨の回答に接した(次の各項目は上記の各番号に対応)

① 研究対象分野として病理学全般に、ブライオリティをおく都合上、 管理責任はコスタリカ大学医学部病理学教室とする。

- ② 米国(シカゴ)でオペレーターを努めた経験者が2名いる。
- ③ コスタリカ大学内に新しく建造する。着工はコスタリカ側で作成 済の設計図面につき調査団と協議し、承認あり次才行いたい。又、

完成に要する期間は4ヶ月あれば十分で建造に要する所要の予算もすでに確保済みである。(当初はコスタリカ大学医学部分室の内部改造の予定であった。)

- ④ 電子顕微鏡及び付帯設備のスペースは 127.5 m² でその内訳は下記の通りである。
 - ①電子頭做現設位室~3.6 m×4.1 m
 - 回標本作成室~7.3 m×4.4 m
 - ○暗室(及び写真, 図案作成室)~7.2 m×2.9 m
 - ○事務室(及び研究室)~6.2 m×4 m
 - ●倉庫(エアーコンディショナー,水セントラルヒーティング設備等)~2.6 m×4.1 m
- ⑤年間所要額は最優先に確保する。

以上のような、2年半にも及ぶコスタリカ側との諸経維及び我が方の基本方針に基づき大阪大学墩生物学研究所教授深井考之助を団長とする3名の調査団が掲載され、昭和48年10月27日(土曜日)~11月14日(火曜日)の19日間コスタリカ共和国へ医療協力実施調査団を派遣するに至ったものである。

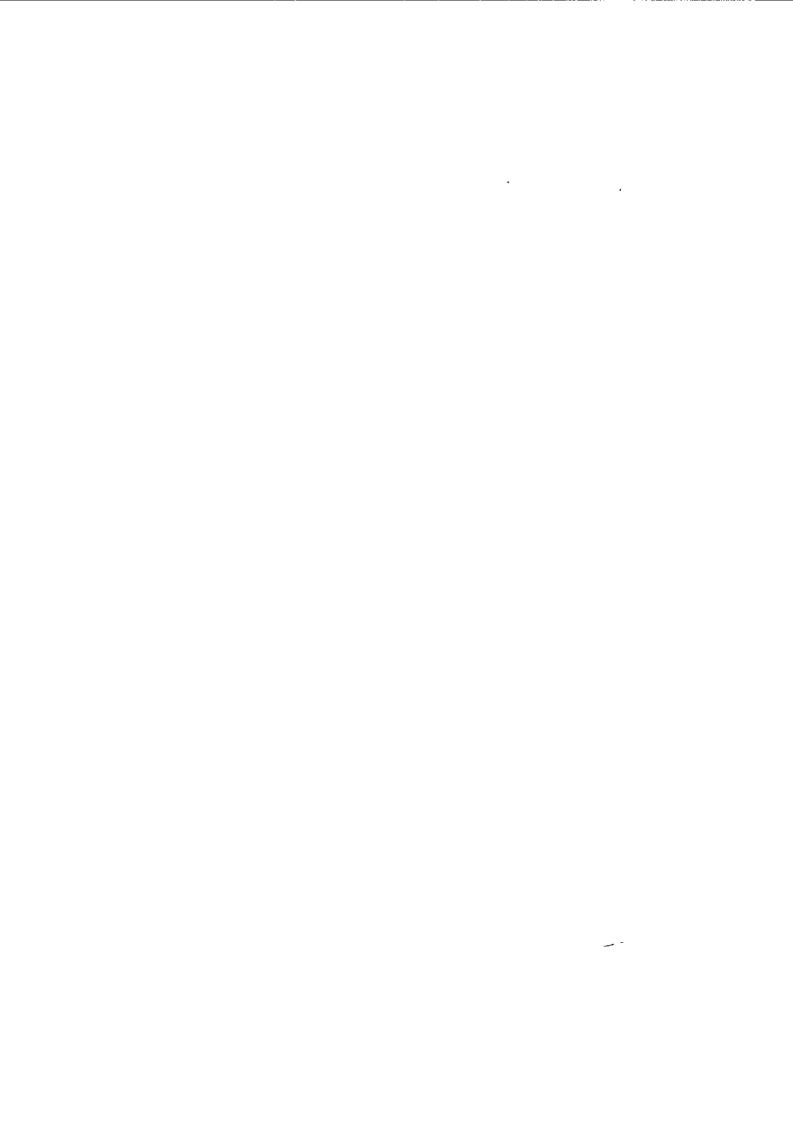
〔調査項目〕



〔調查項目〕

我国の協力方針については、前項でふれた経維もあるので制愛するが低子顕微鏡に直接関係する事項につき、調査すべく予定した項目は、下記の通りである。

- A コスタリカ側の電子顕微鏡設置の目的と将来計画
- B 関係要員(Academic 及びTechnical Staff)の電子顕微鏡に対する習熟度。
- ひ コスタリカ側要員の我国への研修計画
- D 日本側専門家の派遣計画とその具体的な待遇(特権,免除の問題) について
- E 供与機材等について
 - ① 日本側供与分
 - ② コスタリカ側購入分
 - ③ 電子顕微鏡設置場所とスペースの問題
 - ④ 輸送費の負担範囲
- F 供与機材の管理体制と保守修理の事情
- G 電気・ガス・水道・エアーコンディショナー等の事情
- H 運営費の出所(特に消耗品について)
- I コスタリカ国内の医療事情
 - ① . 関係医療施設及び検査施設(病院・研究所等)
 - ② 他国の援助状況(但し,医療面)
 - ③ 一般医療事情
- J その他の一般事情



コスタリカ政府関係当局との交渉経過



コスタリカ政府関係当局との交渉経過

A. 出発前の対応

日本側に於ては、調査団の編成と共に協力の基本方針としてのRecord of Discussion の草案が起草され、関係官庁、および関係者間に於て調整の上日本側原案が得られ、協力方式としては、電子顕微鏡の供与のみに重点をおくのではなく、これを使用しての最も効果的な基礎研究および教育指導が行なわれる部門、特に病理学、解部学、微生物学等に重点をおいた方向でとり進めることとなった。

尚調査団偶からは本協力計画が今後の中米地域への協力に重要な影響をもったとにかんがみ、外務省の直接の担当官である樋口事務官に調査団と同行されるととを強く要望し、関係筋の諒承を得ることができた。

調査団はUnsta Rica がスペイン語国であることに懸念をもち、特に電頭 関係に関する件は複雑であるので、諒解を得るために下記の背類を英文で準 備し、関係者に頒布の上協議を行なり方針をとった。

- 1. R. D. 草案
- 2. 日本側の考慮している協力の要点(1.の要点のみを書きぬいたもの)
- 3. 討論,決定を要する問題点のリスト。
- 4. 日本側が供与を考慮しつつある電子顕微鏡2種の性能要目のリストン よびそれぞれのカタログ
- 5. 超ミクロトームについて
- 6. ナイフメーカーについて
- 7. 附属資材について
 - a. 試薬・消耗品のリスト
 - b. 写真関係器材リスト
 - c. その他の必要資材リスト

- 8. 電子顕微鏡スペアパートリスト
- 9. 大阪大学微生物病研究所その他に於ける電顕設置の現状を示す図面および写真
- 10. OTUA が外国に供与した電子顕微鏡の現況写真
- 11. 電子顕微鏡の応用説明のための参考写真アルバム
- 12. 同上事籍(写真集)2冊

B. 交渉経過の大要

現地到着後10月30日Costa Rica 外務省技術協力課長と接触し、日本側 R. D. 草案を提出し、当方の考え方を説明し、先方の状況の説明を受けた所、Costa Rica 側では協力の窓口となるべき電顕設置希望のグループが数個あり、その間の調整がまだすんでいないことが判明した。

Unsta Rica 大学医学部は全部が San Pedroキャンパス内にあるのではなく

- 1) San Pedro キャンパスには生理学、生化学等の基礎部門のみがおかれている。又微生物学部門は医学部とは別のFacultyとして独立している。
- 2) 臨床部門およびこれに関係の深い病理学部門等は国立病院に附設されていて学生の教育の方はこれらの病院で行なわれ、その主要なものは
 - a. Hospital San juan de Dios
 - b. Hospital de Ninos
 - c. Hospital Mexico

更に、

である。

- 3) San Pedroキャンパス内における他学部たとえば農学部の植物病理学 関係者からも電子顕微鏡のウイルス学的応用の強い希望がある。
- 4) 同じく分子生物学グループからの要請も強い。

等の現況から早急に当面の責任者と協議に入ることは困難であると判断された。

したがって調査団としては先づ全般的に先方の意向を知るためにUnsta Rica 大学 Rodriguez 学長,Trejos 評議会議長(10月30日),Ortich 厚生大臣, Valberde 衛生局長(10月31日), Gamez 文部大臣(10月 31日)に面会、R.D. 草案の内容を説明し先方の意見を求め懇談した。と れらの会談によって大学、文部省関係と厚生省関係とには意見の相違がある ことが明らかになったが R.D. 草案に関しては何れもよく諒解され、同意が 得られた。調査団は更に当面の最高費任者である Facio 外相に面会(10月 31日) し、R.D. 草案に関し諒解を得ると共に、協力開始の前提となる Unsta Rica 側の意見の調整統一を求めた。 同3 1 日夜調査団は大統領官邸 に於てAguitar 副大統領に接見の機会を得たので、電子顕微鏡による最近の 進歩を説明するかたはら、調査団の直面している難点 —— Unsta Rica 側の 意見不一致 ―― に関して調整をお願いした。副大統領は碧処を約され,大統 領と連絡された上, R.D. 草案には全く異議はなく,これについて先づ基本 的に同意した上で関係者と細部の協議に入るべきではないか,と示唆された。 調査団としては調査,具体的協議を終了した後に R.D. 調印を行なりのが建 前であると考えていたが、当時の状況から基本的条項の合意を先にするもや たなしと判断し、Costa Rica 側首脳の諒解もとりつけたことでもあるので、 直ちにUnsta Rica 側電子顕微鏡調整委員会と作業委員会をもち、時日を空 費することを避けることとした。

11月1日午前 Costa Rica 大学医学部に於て電子顕微鏡調整委員会と調 在団の間にオー回作業委員会が開かれ、調査団側から資料にもとずき当方の 考慮している協力方針を細部にわたって説明し、R.D. 草案をも提出した。 又協力方針は双方の協議によって決定されるべきものであり、日本側は討議の進行を助けるために原試案を出している旨を念のため説明した。日本案は 全く修正の要なしとして諒承され、ついで協力によって供与されるべき器材

の説明が行なわれ、日本側としては代表的な電子顕微鏡2機種を紹介し、された附属すべき機材についても資料について説明した。これに対しUnsta Rica 側から質疑があり、沙二回の会合までに電子顕微鏡の機種を選定し、附属資材のリストを検討修正しておきたい旨の意志表示があった。又日本側からは電顕関係者の経歴・業績等に関して説明をもとめ、1名の優秀な研究者が在籍していることを確認することができた。

更に現在電子顕微鏡設置場所として数ヶ所の候補地があるので、その各々について技術的に調査団が検討し、その結果を大学側に知らせてほしいとの要請があった。(調査団はこの要請に応じて候補地の実地調査を行ない、環境、立地条件、震動、交流漏洩磁界等に関する調査結果を団長事業の形で Costa Rica 大学々長宛送付した。附 1. 2 参照)

同日Costa Rica 外務省を通じて日本大便館に対し、協力の基本としてR.D. の合意署名交換を11月2日午後に行ないたいとの申し入れがあり、先方の署名権者は大学総長である旨の通告があった。日本側は協議の上これに、応ずることとし、11月2日午後4時外務省黄金の間においてRodriguez Costa Rica 大学々長と調査団々長がR.D. に署名交換し、Costa Rica 側 Facin外相、日本順人見大便が立会われた。

その後調査団は11月3日電顕調整委員と説明補足、質疑のための会合をもち、11月4日には電顕輸送のためのPuntarenas 港および同港から 首都 San Jose への道路視察を行ない、支障ないことを確認し、調整委員と陸揚げおよび輸送方針について打合せた。

11月6日Costa Rica 大学医学部に於て第二回の作業委員会が開かれ、Costa Rica 側から電頭機種の選定の結果が報告され、供与資材に関してはCosta Rita 側で購入あるいは準備可能のものを削除した修正リストの提示があった。日本側はCosta Rica 側の機種選定を諒承し、関係方面に伝達することを約するとともに、資材リストに関しては共同して修正にあたった。

日本側からは設置場所の決定を早期に行なりより要望したが、コ側からは とれについての現状が説明され、又新賞を考慮しつつある花頭実験室につい て技術的助言が求められ、調査回は既にCosta Rica 側から提出されて いる図面をもとに当面の助言を行なりと共に、條件検討のために、携行した 福洩磁界測定器を寄贈することおよび2週間以内に実験室に関する詳細図面 を送付することを約束した。(この件に関し、寄贈、図面送付は11月下旬 実施を終了した。)

この席上Costa Rica 側から、「今次の協力は医療協力であるが、唯一の電類が来ることになるので広く使いたいと思う。用途は主として医学・生物学の領域であるが、時には更に広い分野にも使いたい時が生ずるが、どう考えるか」との質問があり、これに対し当方からは、医療協力が中心課題であることが確認されるならば、学問の常として境界はないのだから使用に関してはCosta Rica 側が運営にあたるのであり、日本側がとかく言う筋合いではない。しかし研修員の選定についてはあくまで医療協力であることを尊重してほしい旨を説明した。その他専門家派遣・研修に対する希望、今后の学術交流の問題等についても話しあいがあったが、とくに今回の協力具体化に重要な項目はaide-memoire として記録にとどめ、R.D.に添付するとになった。又Costa Rica 側から協力開始后の設備・遅営の経費はすべて国致である大学校費によって支続されるとの確認があった。

11月7日調査団は大統領私邸に於てFigueres 大統領に接見の機会を 得,電子顕敬譲についての説明等を行なうことができたが,席上大統領から 今回の協力の発足に対して謝辞があり,今后とも協力の発展を望む旨のべら れた。

電同日午前には外務省から特に派遣のあった樋口事務官および隅田団員が Costa Rica 外務省を訪問、今次の協力に伴って問題となる派遣専門家の 養 待遇の具体的内容の確認等がなされた。(附3 参照)

鷹11月8日団長は Costa Rica 大学々長を訪問し,現在までの作業委員会

での作業進捗状況および候補地検討作業について説明すると共に,

- 1. Project site を早期に決定されたいこと。
- 2. 運営管理の要摘を早期に決定されたいこと。

を申し入れた。これに連関し、学長および11月9日大使館を来訪された Rodrigo Gutierez 医学部長から大学側の教授会・評議会への上程等の手続きから上記についての決定は11月13日以降にならざるを得ない旨の説明があった。又団長は電顕研修要員の選定を調査団の在コ中に行ない、できれば面接したい旨を申し入れた。

C. 総 括

以上の交渉経過を総括すれば下記の通りである。

- 1. R.D. 草案を骨子として Unsta Rica 側首脳と協力の大網について話しあい諒承を得た。 (参照: R.D.)
- 2 協力の基本としてR.D.に署名交換
- 3. R.D. による基本的瞭解にもとずき作業委員会において細目のつめを 行なった。
- 4. 専門家待遇に関しては外務省筋からのつめが行なわれた。(参照:附3);
- 5. Unsta Rica 例の具体的意志決定に関して調査団は技術的援助・助言を行なった。(参照:附1かよび2)
- 6. 協力に関する具体的事項に関してAide memoire を作成して記録に 留め、R.D. を補足した。(参照:Aide-memoire)

通常の場合であれば医療協力の発足にあたってはまづ実情調充が行なわれ、 ついて如何なる協力を行なうかの調査、そして協力実施のための方策がとら れている。今次の調充団はその派遣に至るまでの経緯が進んでいたためにこ の3つの過程を全部兼ねねばならなかったのは大きな負担であったし、そのために先方国の状況をその場その場で判断してゆかねばならなかったことは時日的な制約とともに大変苦しいことであった。しかしUnsta Rica 側の寛容さと熱意とはこの苦しさをきりぬけることができた強い支えであったと言えよう。Unsta Rica 側が当調在団の立場をよく理解され、常に好意的に、接触が続けられるよう配慮されたことは誠に根謝にたえない所である。

一方在Unsta Rica 大便館の今次の協力開始に対する熱意と周到な事前準備とは本調査団が任務を遂行しえた基礎であって関係各位の先見の明と努力にはあつく敬意を表すると共に今後も協力の発展をお見守りいただきたいと思う。

又今回の調査団に多忙をおして同行を読承された樋口事務官からは終始適切な 助言をたまわり、或は自から交渉の面にもたたれ、我々の任務をお助け下さ ったことは特征してお礼申しあげなければならない。

D. 追 記

調査団が在コ中に回答を得ずに終った Projict Site については、その後 Costa Rica 倒から San Pedro キャンパスに決定した旨の通知があり、研修 員に関しても2名の決定通知があり、1974年3月から3ヶ月間の研修 が実施される予定である。

又電子顕微鏡研究室の新営も1974年4月末までに完了の予定との連絡があった。

附1,2 Costa Rica 大学々長宛書翰。

附3 派遣専門家の待遇に関して

Professor Dr. Eugenio Rodriguez Vega Rector Universidad de Costa Rica Ciudad Universitaria

Dear excellency Rector

I have reported the results of stray magnetic field measurements (caused by alternating current), at the candidate sites for the installation of the electron microscope, at the working committee held in Faculty of Medicine of your university yesterday and added some personal opinion also.

When I visited you on the other day, I understood that you requested me to send technical information about the site for installation directly to you. As I speak only very poor English, I am sending you those informations to you in form of a letter.

The result of measurements in San Pedro Campus is shown in Fig. 1. Candidate sites 1 - 3 are located inside the building of Faculty of Medicine. As the maximal tolerable strength of the stray field for the microscope is 3 milligauss, the site 1 has no problem regards to the stray field. At sites 2 and 3, we detected too strong stray field for the microscope. At the sites 4 and 5, which locate outside the building, we found out stray field of nearly 3 mG at site 4 while the condition at 5 is suitable for the microscope.

The strong stray field detected at the sites 2, 3, and 4 was found to be produced by two 50KVA transformers and the

high voltage power line connected to them. These transformers could be easily moved more than 50 m apart from the candidate site and simultaneously the power line could be removed. As the results, the strength of the field at 2, 3, and 4 could be reduced but still the effects of big current through the secondary line to the building might remain.

As you may already know, we can expect full performance of the microscope only when it is installed in vibration-free place. So, from my experiences, it is usually not recommended to place the microscope in a part of big building, built regardless to the microscope, to avoid external vibration.

From these reasons, the candidate site 5 is the best place among others and it is recommended to set up new laboratory for the microscope. In this case, every condition for the microscope can be considered in the stage of planning. This may be more economic and profitable than the modification of pre-existing building.

The results at San Juan de Dios Hospital area are shown in Fig. 2. We have checked two candidate site, A and B, in this area. Some measuring points in A showed a little higher stray field than tolerable value but the strength at almost other points remained within a range of 2.4 - 3 mG. These field strength are produced by the high voltage line passing along the west side of the site and the 6 transformers located on northern side of the site. Same to the case in San Pedro, it may be easy to move these sources to the harmless position and the field in site A can be reduced to adequate level. This site

seems to be free of vibration. I have heared that the old Psychiatry Hospital buildings which are surrounding the place will be demolished in very near future. All these consideration indicate the site A is also good place for installation of the microscope.

At the western and northern parts of site B, strong stray field was detected. This is caused by the high voltage power line passing north side of the site and some unknown source. In such a case it is very difficult to improve the condition. Further, this place is surrounded by too many buildings and accordingly not recommended for the microscope.

When the microscope is installed in this Hospital Area, it is recommended to have a new building and the reason for this is same to the case in San Pedro Campus.

Furthermore, I have heared there is a space considered for the microscope in Mexico Hospital but I have not yet got the chance to visit there.

Above mentioned are the survey for the physical back ground for the microscope. These are critical for the microscope but human relationships surrounding the microscope is equally important for the development of the application of the microscope. The microscope is not autonomous. Without well-qualified people we can not expect its activity. As you have already understood, as the electron microscope is a little more complicated than usual instruments, not only enthusiasm but also enough knowledges and experiences are strongly requested to make the microscope useful for the various fields of science. It is my big pleasure that I can count many excellent peoples who

are interested in electron microscopy: biologist, virologist, phytopathologist in San Pedro Campus and talented pathologists and virologist in Hospital area. All these people are absolutely reliable.

I convince that the microscope should always be surrounded by interested and sincere researchers to assure its activity. So, such a location which may dilute out the scientific interests of the researchers should be avoided. (If the location is not chosen properly, the microscope may become "sleeping beauty" forever.)

For the final decision of the location of the microscope, may I suggest you to check not only simple scientific interest, but at same time knowledges and experiences in electron microscopy of the related researchers?

I have been impressed deeply to see how enthusiastic and how serious the people in your university are. I respect them and I am sure they will be pioneers also in the field of electron microscopy.

Again, may I emphasize that a powerful locomotive is necessary in early stage of electron microscope research unit to convert the potential energy of the newcomers into activity? I have recognized that your university already has such "locomotive". When such person is assigned for suitable position, he can lead many hopeful researchers to wide and new front of electron microscopy. (Of course the cooperation of several - may be 3 - technician is necessary for his work.)

Remembering the main emphasis of the cooperation of this time between your country and my country is on the advancement of basic medical education and bio-medical research works, I hope the microscope is applied to the wide variety of researches and at same time become useful for the welfare of your people.

I have written not only the technical aspects but also added some of my feelings. (might be too much!)

If you can pick up something useful for you from this letter, I'll be very happy and will be very much satisfied. Will you please excuse me for my poor expression and also impolite expressions?

Wishing prosperous development of the University of Costa Rica,
Sincerely yours,

Konosuke

Fukai

Professor of Osaka University Research Institute for Microbial Diseases, Osaka University Head of the Japanese Mission

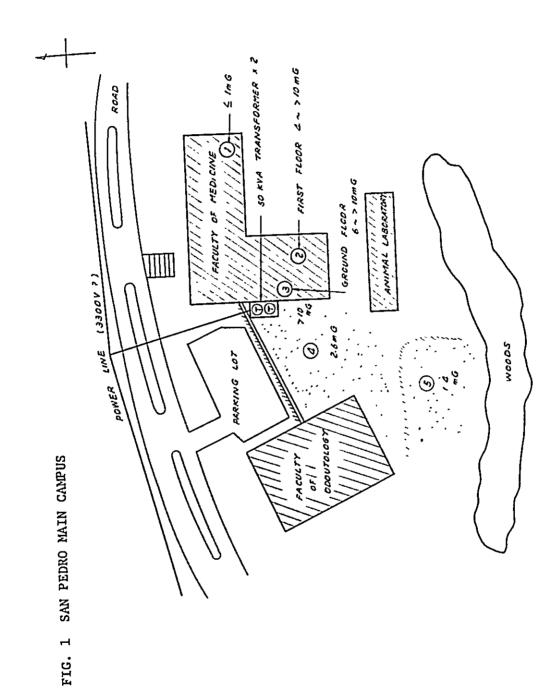
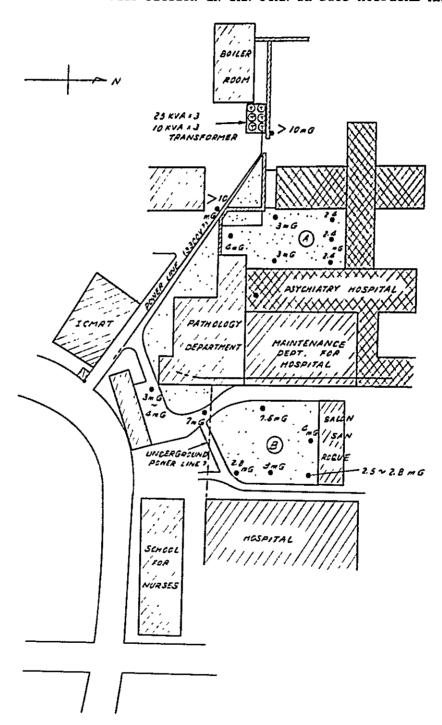


FIG. 2 UNIVERSITY SECTION IN SAN JUAN DE DIOS HOSPITAL ARI



Professor Dr. Eugenio Rodriguez Vega Rector Universidad de Costa Rica

Dear excellency Rector

This is the supplementary technical information on the candidate place for electron microscope installation. The Japanese mission had an opportunity to visit Mexico Hospital (The mission understands this is a part of university medical school) this morning. The director Dr. Saeed T. Mekbel, Dr. Manuel Aguilar Bonilla and other staffs kindly showed us all of the hospital and teaching facilities. The mission could also take surveys on stray field.

The results of measurements are shown in attached Fig. 3. On every point of measurement, except inside the service building, the strength of the field is far lower than the cases of San Pedro Campus and Hospital San Juan de Dios. This condition seems to be highly satisfactory for installation of electron microscope. Regards to vibration, when the back side of the hospital is considered as location site of the microscope, no trouble would be expected. Moreover, there are enough spaces and free choice for location site in this area.

The best site in this area seems to be just behind the experimental building (cirugia experimental) as this site can be reached conveniently from any parts of the hospital and even from outside the hospital (shown as * in Fig. 3).

The mission was deeply impressed to observe academic and teaching activities in this area and understood many excellent medical university staffs are working in this area.

From physical point of view, this area is recommended as the most suitable place for installation of microscope among three places visited (San Pedro Campus, Hospital San Juan de Dios, and Hospital Mexico). The mission feels the working staffs in this area are as active as the staffs in two other area and their standards are high enough for electron microscope study though there is no experienced person in this area at present.

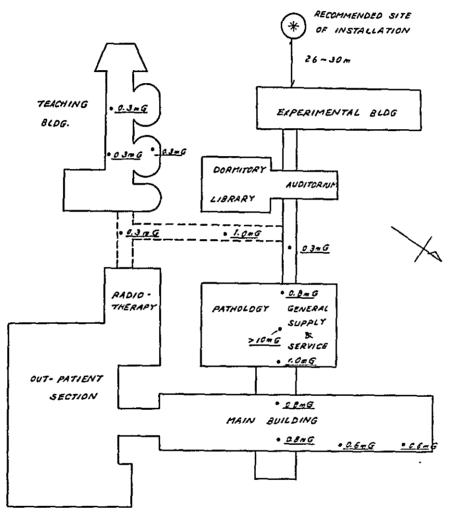
May I recommend you to consider Hospital Mexico area additionally as a highly suitable candidate place for installation when your university make final decision for location of the microscope ?

Sincerely yours,

Konosuke Fukai Head of the Japanese Medical Cooperation Implementation Survey Mission

FIG. 3 MEXICO HOSPITAL AREA

BACK SIDE



PHAZA

FRONT SIDE



RECORD OF DISCUSSIONS他



RECORD OF DISCUSSIONS他

RECORD OF DISCUSSIONS BETWEEN
THE JAPANESE MEDICAL COOPERATION IMPLEMENTATION SURVEY
MISSION AND THE AUTHORITIES CONCERNED OF
THE REPUBLIC OF COSTA RICA ON MEDICAL COOPERATION

The Japanese Medical Cooperation Implementation Survey Mission organized by the Overseas Technical Cooperation Agency which is entrusted by the Government of Japan with the execution of its overseas technical cooperation schemes, and headed by Dr. Konosuke Fukai, Professor of Research Institute for Microbial Diseases, Osaka University, visited the Republic of Costa Rica from 29th October to 11th November, 1973 and discussed with the Authorities concerned of the Republic of Costa Rica on the implementation of technical cooperation in the field of medicine between the two countries.

As a result of their discussions, the Japanese Medical Cooperation Implementation Survey Mission and the Authorities concerned of the Republic of Costa Rica have reached the understanding that they will recommend to their respective governments the adoption of necessary measures to implement the following:

 medical education and bio-medical research works by the use of an electron microscope at the Faculty of Medicine, University of Costa Rica.

- 2. The period of the cooperation will be from November, 1973, to March, 1976 (the end of 1975 Japanese Fiscal Year).
- 3. In accordance with the laws and regulations in force in Japan and within its annual budgetary appropriations, the Japanese cooperation will be extended in the forms of supply of equipments, dispatch of experts, and provision of training facilities in Japan at the expense of the Government of Japan, upon receipt of application forms Al, A2, A3, and A4 from the Government of the Republic of Costa Rica.
- 4. In accordance with paragraph 3 above, the cooperation of the Japanese side will be carried out in the following way.
- (1) Supply of the equipments;

One electron microscope and necessary equipments for electron microscopy be provided at the first stage.

(2) Dispatch of Japanese experts;

One engineer for the installation of the electron microscope and for the elementary training of electron microscope manipulation and maintenance be dispatched for a few months, after the arrival of the equipments in Costa Rica.

(ii)



- (ii) One expert of electron microscopy in bio-medical field be dispatched as a consultant for several months to give advise on research work using the microscope.
- (iii) Such other academic experts in some specified fields as may be requested by the University of Costa Rica, be dispatched at a suitable time during the period of the cooperation.
- (3) Provision of training facilities in Japan;
 In Japanese Fiscal Year 1973, in advance of the arrival of the equipments, two (2) fellowships be offered for training of Costa Rican personnel for a period of several months each:

One for the candidate for microscope operator and the other for the candidate for an adviser on researches in bio-medical fields.

- 5. In the course of the cooperation, following measures will be taken by the Costa Rican side;
 - (1) The equipments and materials to be supplied by the Government of Japan will become the property of the Government of the Republic of Costa Rica upon being delivered C.I.F. at a port or an airport of Costa Rica.

Therefore,

Therefore, (a) custom duties, internal taxes and other similar charges, if any, imposed in respect of the equipments and (b) local expenses necessary for the transportation, installation, operation, and maintenance of the equipments be met by the Costa Rican side.

Appropriate actions be taken for custom clearance and domestic transportation from port of entry to the place of installation in the University of Costa Rica, in order to keep the electron microscope and other equipments in good condition.

(2) The Faculty of Medicine, University of Costa Rica, will be responsible for the management of the equipments to be supplied and for the assignment of Costa Rican counterparts for Japanese experts.

Laboratories for the electron microscope and specimen preparation and a dark room with necessary facilities such as plumbing, wiring, air-conditioning, etc., will be prepared in the University by the Costa Rican side.

The Government of the Republic of Costa Rica secure annually adequate budgetary appropriations to meet running expenses for the equipments.

(3) (i) The Japanese experts (including their families)
be granted in Costa Rica privileges, exemption
and benefits (including provision of suitable
furnished

furnished living accommodations and transportation facilities for official duties) no less favourable than those granted to experts of third countries or of international organizations such as the United Nations serving under similar circumstances.

- (ii) The Japanese experts be exempted from any liabilities in respect of any accident that may arise out of bona-fide discharge of their official duties.
- 6. In order to ensure effective cooperation between the two countries, it is understood by both sides that necessary information in the fields related to the cooperation be mutually excharged through appropriate channels.

San Jose, November 2nd, 1973

Dr. Konosuke Fukai Head of the Japanese Medical Cooperation Implementation Survey Mission Lic. Eugenio Rodriguez Rector University of Costa Rica

COMPOSITION OF THE PANEL

UNIVERSITY OF COSTA RICA

Dr. Rodrigo GUTIERREZ, M.D.

Dean Faculty of Medicine

Dr. Rodrigo GAMEZ, agronomist

Head Virus Laboratory 'Faculty of Agriculture

Dr. Francisco URENA, biologist

Head Department of Physiology

Faculty of Medicine

Dr. Pedro MORERA, microbiologist Head Department of Parasitology

Faculty of Microbiology

Dr. Jose M. JIMENEZ, biologist

Department of Virology Faculty of Biology

JAPANESE MEDICAL COOPERATION IMPLEMENTATION SURVEY MISSION

Dr. Konosuke FUKAI

Professor and Chairman Department of Preventive

Medicine

Research Institute for

Medical Diseases Osaka University

Dr. Takeshi YAMADA

Ophthalmologist Gunma-Chuo Hospital (Researching Staff of Gunma University)

Mr. Eiryo SUMIDA

Coordinator

Staff, Medical Cooperation

Department

Overseas Technical Cooperation Agency

Mr. Hiroshi HIGUSHI

Observer

Official of Ministry of

Foreign Affairs

Second Technical Cooperation

Section

Economic Cooperation Bureau Ministry of Foreign Affairs

AIDE-MEMOIRE

The Japanese Medical Cooperation Implementation Survey Mission and the Electron Microscope Technical Administrative Committee of the University of Costa Rica, met on October 6, 1973, to discuss in detail over the Record of Discussion signed previously between the Mission and the University. The following are the results of the exchange of opinions between the Mission and the Committee.

- 1.) The program of medical cooperation proposed recently by the Government of Japan to the Government of Costa Rica is quite significant and promising. The program will contribute enormously to advancement of basic medical education and bio-medical research work in this country. It goes without saying that the Government of Costa Rica and the University will render every possible facilities to implementation of the project.
- 2.) The period of this cooperation will be three years, from November 1973 through March, 1976, according to the above mentioned RD. However, the Mission took note of the opinions of some members of the Committee, emphasizing the necessity of enlarging the size and period of this assistance program. The Mission and the Committee agreed on necessity of future celebration of annual meetings with a view to reviewing and checking the progress of the program and also discussing its future course.
- 3.) The Mission asked the Committee to keep contacts with the Ministry of Foreign Affairs of Costa Rica and the Embassy of Japan. The procedure for application of the

assistance as settled in the paragraph 3. (three) of the RD should be respected by the Authority of the University.

- 4.) The Committee asked the Mission to inform the Government of Japan that Hitachi is more preferable than JEOL as supplier of the electron microscope under this program. A list of complementary equipment and materials was prepared after mutual consultations.
- 5.) With respect to the candidates for fellowship under this program, the Committee asked the Mission to inform the Government of Japan that a candidate holding M.D. degree to act as a research advisor in bio-medical fields and the other for a microscope operator of intermediate technical level, if possible, with some background in biological sciences will be presented as official candidates to the Embassy before the end of November of this year. The Committe asked the Mission to recommend the Government of Japan to accept two trainees for a period of one year in the fiscal year 1974 and 1975.
- 6.) The Committee asked the Mission to recommend the Government of Japan to dispatch and engineer for installation of the microscope and for elementary training on manipulation and maintenance of the microscope. The engineer should arrive at San Jose just before the arrival of the microscope at the port of Puntarenas. The supervision by him during its transport from Puntarenas to San Jose is very important. It may be expected that a consultant will arrive at San Jose when the engineer finishes his work, with a view to teaching Costarrican staff how to operate the microscope.

- 7.) The Mission requested the Committee to decide the location of the microscope before the 15th of November this year. The request was accepted. In this connection, the Dean of the University expressed his hope that the microscope be utilized by several Faculties to secure the maximum benefits and asked the Mission of its opinion. The Mission did not oppose to his idea, on condition that the priority be given to the field of medical sciences.
- 8.) Finally, the Mission and the Committee agreed upon the necessity of promoting exchanges of informations in this field. Both parties were convinced that the exchange of views between themselves would open up a new horizon in the relations of Costa Rica and Japan in the field of medical science in general.

ANNEX 3.

LIST OF EQUIPMENT TO BE SUPPLIED

Note: In view of the critical situations of the following three instruments in the cooperation through electron microscopy, the brands and the models are expressly designated according to discussion of the working committee: -

- 1. electron microscope: Hitachi Ltd., HU-12A electron microscope
- 2. ultramicrotome: LKB Produkter AB., LKB 8800 ultretome III
- 3. glass knife making device: LKB Produkter AB., LKB 7800B Knife Maker

Electron microscope:

HU-12A electron microscope, with HK-6 large angle tilting device as an attachment (including vacuum evaporator model HUS-4)

Specifications are as Hitachi brochures.

- 1. electron microscope, main body
- 2. power supply unit
- 3. oil rotary pump
- 4. air compressor
- 5. plate casette
- 6. plate magazine
- 7. plate receiver
- 8. specimen grid holder
- 9. power cable
- 10. cooling water circulating system
- 11. consumable kit
- 12. vacuum accessories
- 13. shock absorber
- 14. tools
- 15. recommended spare parts*
- 16. test report and charts
- 17. instruction manual
- 18. vacuum evaporator with cold trap
- (* described in separate list)

Recommended Spare Parts List for HU-12A

A: Quantity used per unit; B: Recommended quantity

Part No.	Item	A	В
437-1555	pre-centered filament; 10pcs./box	10	20
432-1000	aperture plate 0.3-0.5-0.5-0.7 mm for C2	1	2
432-1001	0.02-0.03-0.05-0.07 mm for Obj.	1	2
432-1002	0.03-0.05-0.1-0.25-0.5- 0.7 mm F.L.	ı	2
432-0339	aperture holder	1	1
432-3090	apeture	1	1
432-0122	holder	1	1
432-1234	base plate	1	ı
432-2786	aperture holder	1	1
432-1206	support	1	1
432-1204	ring plate	1	1
432-1004	Dewer bottle	1.	1
432-2787	fixed aperture, int. 6 mm	1	1
432-2971	fixed aperture, 1st Proj. 5.8mm	1	1
432-2789	fixed aperture, 2nd Proj. 4.8mm	1	1
432-4005	magnetic valve 0624EI, DC 24V	5	3
432-4006	magnetic valve 062EI, DC 24V	8	5
399-1227	spring	1	1
532-1371	valve body	5	1
532-1432	actuator	5	1
432-3751	cylinder glass	1	ı
532-1063	fixed aperture, 1st Cond. 1 mm	1	1

:

Part No.	Item	A	В
532-1012	fixed aperture, 2nd Cond. 1 mm	ı	1
532-0153	specimen grid holder	6	3
532-1144	metal contact	ı	1
532-4000	timing belt #1262	2	2
532-0169	cold finger	1	ı
532-1121	fixed aperture, 1st Proj. 5 mm	ı	1
532-1120	fixed apeture, 2nd Proj. 5 mm	1	1
532-1122	fixed aperture, 2nd Proj. 8.5 mm	1	ı
532-1098	focusing screen 40 mm dia.	1	1
532-1182	alignment screen 40 mm dia.	1	1
532-0118	fluorescent screen 120 mm dia.	1	2
532-1096	fluorescent screen outer 200 mm dia.	1	2
532-1039	cylinder	1	1
532-4001	solenoid valve MC-02-35-1	5	2
532-1236	micro-switch	4	2
Spare par	ts for electronics section:		
532-0533	circuit board assy. mode indicator	1	1
532-0686	circuit board assy. bank rep	1	1
532-0545	circuit board assy. right distri.	1	1
532-0547	circuit board assy. camera seq.	1	1
532-0536	circuit board assy. lamp	1	1
532-0538	circuit board assy. lamp	2	1
532-0555	circuit board assy. exposure time	2	1
532-0554	circuit board assy. evacuation	1	1
532-0548	circuit board assy. Oj. coarse	1	1
532-0543	circuit board assy. left distri.	1	1

Part No.	Item	A	В
532-0524	circuit board assy. mode sw.	l	1.
-	circuit board assy. HV sw.	l	ı
•	circuit board assy. spot size	1	1
	circuit board assy. Obj. modulation	1	1.
	circuit board assy. bank	1	1
532-0556	circuit board assy. BD stabil.	ı	ı
532-0542	circuit board assy. evacuation sequence	l	1
532-0546	circuit board assy. evacuation panel	1	1
532-0551	circuit board assy. HV stabil.	1	1
532-0541	circuit board assy. CT465	1	1
532-0539	circuit board assy. CT461	1	1
532-0540	circuit board assy. CT462	1	1
532-0541	circuit board assy. lens	1	1
532-0501	circuit board assy. PB	1	1
532-0549	heat-sink plate	1	ı
532-0534	heat-sink plate	ı	1
532-5014	push button switch	1	1
532-5015	11	1	ı
532~5017	Ħ	1	1
983-0936	wave switch MSH-203N-2	6	2
983-0226	push button switch MSP-106F	1	1
983-0219	toggle switch MST-406N	2	1
983-0227	push button switch MSP-206R 2-2	1	1
983-0933	rotary switch 2-2-4	1	1
532-0553	II .	1	1
532-0552	n f	1	1
532-0528	rotary switch	1	ı
432-5376	tf .	1	1

Part No.	Item		A	В
532-0559	rotary switch		1	1
532-6023	bimetal switch		1	1
532-5004	variable resistor	2K	2	1
980-7536	tt ,	RA30Y 5K	1	1
980-7534	IJ	RA30Y 3K	1	1
532-5006	11		8	3
* 980 - 1208	11	TF12W 500	4	2
*980-1212	11	TF12W 10K	5	1
*980-1210	tt	TF12W 2K	1	1
*980-5289	11	GFP124 200K	1	1
* 980 - 5288	11	TF12W 1K	1	1
*980-5287	11	TF12W 25K	5	2
* 980-5286	11	TF12W 50K	1	1
980-5295	11	46HD-3 2K	1	1
980-5294	11	46HD-3 3K	1	1
980-5293	II	46HD-3 5K	2	1
*980-5292	11	20HP-3 500	4	1
*980-5291	11	KRR-25-5 10K	1	1
*980-5290	II.	KRR-25-5 2K	14	2
* 980 – 7522	ff	RA30Y15SB 20 J	4	1
*980-7531	11	RA30Y15SB 2K J	2	1.
*980-7205	11	RA20Y15SB 50 J	2	1
*980-7002	n	RV16YP10SB 1K	1	1
*980-7010	11	RV16YP10SB 50K	2	1
*983-0697	toggle switch MST-	-105D	8	3
*983-0698	" MST-	-205N	1	1
*532-4013	meter relay SN-4A	100 microA	1	1
*983-0302	relay A-90-2P DC	24V	3	1
*983-0841	" A-100-4P DC	247	30	5

```
В
                                                        Α
Part No.
                     Item
                                                        1
                                                            1
*983-0840 relay A-100*4P DC 12V
                                                        5
                                                            2
                 MY-2V-HN DC 24V lsec.
*983-0930 "
                                                            2
                                                        7
                  MY-2V-HN DC 24V 3sec.
*983-0931
                                                        1
                                                            1
*983-0932 "
                 MY-2V-HN DC 24V 5sec.
                                                        1
                                                            1
                 MY-2V DC 24V
*983-0924
                                                        1
                                                            1
           integrated circuit 751P
*982-5077
                                                        1
                                                            1
                               118A
*982-5057
                                                        8
                                                            2
 982-0018 lamp 8V 0.15A
                                                            1
                                                        1
 982-0113 pilot lamp BFB-14, red
                                                           10
                                                       70
*982-0122 lamp CL-385BPC
                                                       11
                                                            5
*983-3105 fuse 1A glass
                                                        1
                                                            1
 983-3106 fuse 2A glass
                                                        1
                                                            1
*983-3107 "
                 3A glass
                                                        6
                                                            3
*983-3109 "
                 5A glass
                                                            1
                                                        1
*982-5081 integrated circuit 503K
*532-5368 "
                                                        l;
                                                            4
                              1304, select
                              1304, select
                                                        4
                                                            4
*532-5369
 982-3109 transistor 2SC665-H-B
                                                       13
                                                            5
                                                       14
 982-3485 "
                      MJ2841
                                                            5
                                                            1
*982-3134
                      2SD120-H-B
                                                        2
*982-3088
                                                        6
                                                            2
                      2SD120-H-B
*982-3015
                      2SC281-H-B
                                                        6
                                                            2
*982-3495
                      2SC680-A
                                                        8
                                                            1.
                      2SA537-H-C
*982-3309
                                                        2
                                                            1
*982-3191
                      2SC907-H-B
                                                        6
                                                            2
*982-3192
                      2SC708-H-B
                                                        4
                                                            1
 982-3493
                      2SD110-0
                                                            4
                                                       17
 982-3494
                      2N3055
                                                            4
                                                       17
*982-5026 integrated circuit HD2503
                                                        1
                                                            1
```

Part No.	Item		A	В
*982-5032	integrated circ	uit HD2510	1	1
*982-3044	Zener diode 157	758-н	2	1
*982-3047	Zener diode 182	2191	2	1
*982-3193	Zener diode 152	2192	2	1
982-5082	integrated circ	uit TH9015P	12	2
*982-3040	Zener diode 157	757-н	3	1
*982-3258	silicone diode	V03C	200	10
*982-3057	u	1584 - H	18	4
532-4014	circuit board a	assy. 3P-1	1	1
532-4015	II .	2P-1	1	1
532-4016	tt.	2P-2	1	1
532-4017	tt	2P-3	1	1
532-4018	11	2P-4	1	1
532-4019	11	2P-5	1	1
532-4020	11	3P-2	1	1
532-4021	tt	2P-6	1	1
532-4022	fuse 50A		2	2
532-0550	high voltage ta	ınk	1	1
532-0515	cable head		1	1

Note: Those items with asterisk are mounted on circuit board assembly respectively but listed here as the stocks of individual part be recommendable.

<u>Ultramicrotome</u>:

LKB 8800	Ultrotome III	1 set
8801A	main unit	
8802A	control unit	
8810	microscope stand	
8804	microscope (including microscope holder	
	8806 and section collector 8850)	
8831	orientation head	
8815	accessory kit I	
8816	accessory kit II	
8818	set of 30 graduated, stainless steel	
	specimen holders (8840E x 5, 8840F x 10,	
	8840G x 10, 8840K x 5)	
4806A	ultrotome table	1

Glass knife making device:

LKB 7800B	Knifemaker (main unit 7800B)	1 set
7890-04	glass strips, 25 mm x 400 mm	
	(30/package)	20 pKg
7894-01	scoring wheel	2 bags.

Equipment for photographic works:

l.	enlarger; Fuji model 45-S, with Fujinon EP	
	5.6/135 mm lens and 4 x 5" negative carrier	1
2.		
	Fujinon EP 3.5/50 mm	1
	" 5.6/90 mm	1
3.	enlarger lamp; spare, 100 V 150 W	10
4.	negative carrier for enlarger 45-S	
	Leica size	1
	6 x 9 cm size	1
5.	easel mask for enlarger 45-S	
	#1012	1
	# 3W	1
6.	focusing device; LPL focuscope II	1
7.	enlarger electronic timer; Lucky timer 2	1
8.	slidac (variac); 130 V 5 A output, primary 100 V	1
9.	electric constant temperature development vat;	
	SANYO model DT-60	2
10.	stainless processing tray, HANSA	
	10 x 12"	4
	8 x 10"	3
	6 x 7"	3
11.	plastic deep tray; HANSA 10 x 12"	2
12.	plastic developing tank for 35 mm film with	
	spare stainless reel; LPL	3
13.	hard rubber tank for 4 x 5" film	3
14.	stainless film hanger; No. 6	24
15.	stainless print tongue; Cherry brand	5

16.	stainless stirrer, LPL	3
17.	plate holder for 12 sheets film	3
18.	stainless roll film clip, LPL	10 prs
19.	safe light lamp; HANSA 3 windows, with	-
	safelight filter	2
20.	safe light filter; spare, HANSA	
	#2	2
	#4	2
	#5	2
21.	dark room timer; HANSA	1
22.	film drier; FC model PW-27-40	1
23.	auto-printwasher; FC PW-21	1
24.	auto-glazing machine; FC model D	1
25.	washing syphon; HANSA	2
26.	metal cutter; 11 x 12"	1
27.	plastic photo-solution bottle; color in white	
	1 L	14
	2 L	4
	5 L	4
28.	negative brush; UN-100	2
29	magnifier; Peak, 10 x, with micrometer scale	2
30.	light box; Fuji color light box	2
31.	electron microscopic film; Fuji type FG,	
	3 1/4 x 4" (50 sheets/box)	100
32.	35 mm film for slide preparation;	
	Fuji Neopan F, 20 exposures	24
	Fuji minicopy, 20 exposures	514

```
photo-enlarging paper:
33.
       Fujibromide # 2 JP 13x18cm (250 sheets/box)
                                                         1
                                    (100 sheets/box)
                                                         1
                        JP(8x10)
                                    (100 sheets/box)
                                                         1
                        JP(10x12)
       Fujibromide # 3 JP 13x18cm (250 sheets/box)
                                                         3
                                    (100 sheets/box)
                                                         3
                        JP(8x10)
                                    (100 sheets/box)
                                                         3
                        JP(10x12)
       Fujibromide # 4 JP 13x18cm (250 sheets/box)
                                                         2
                        JP(8x10)
                                    (100 sheets/box)
                                                         2
                                    (100 sheets/box)
                        JP(10x12)
                                                         2
34.
     developer:
               Copinal, for EM film (4 L can)
                                                        40
               Microfine, for F film (600 ml can)
                                                        20
               Papitol, for printing (8 L can)
                                                        40
    short stop bath: Fuji acetic acid (1 L bottle)
35.
                                                        10
    fixing both: Fuji Fix FFH (4 L can)
                                                        40
36.
     hypo-remover: Fuji QW (100 L can)
37.
                                                         3
    photo-flow solution: Fuji Driwell (2 L bottle)
38.
                                                         3
```

Reagents and materials for specimen preparation

(All reagents should be of "special grade" or equivalent.)

ı.	osmium tetroxide	0.5 g	20
2.	glutaraldehyde, 25%	10 g	20
3.	s-collidine (2,4,6-trimethyl phridine)	20 ml	4
4.	N-HCl	500 g	3
5.	potassium permanganate	500 g	1
6.	sodium barbiturate	250 g	1
7.	sodium cacodylate	100 g	6
8.	Propylene Oxide	500 g	40
9.	n-butyl glycidyl ether	500 g	10
10.	Epon 812	200 g	20
11.	Epon 815	200 g	20
12.	methyl nadic anhydride (MNA)	200 g	20
13.	dodecenyl succinic anhydride (DDSA)	200 g	20
14.	DMP-30 (2,4,6-tri (dimethylaminomethyl)		
	phenol)	25 g	4
15.	uranyl acetate	25 g	4
16.	lead nitrate	500 g	1
17.	lead acetate	500 g	1
18.	sodium potassium tartrate	500 g	1
19.	sodium phosphotungstate	25 g	14
20.	potassium phosphotungstate	25 g	14
21.	collodion, 2% solution in amyl acetate	100 g	3
22.	Bioden mesh cement	100 g	3
23.	formvar (polyvinyl formal)	100 g	1
24.	ethylene dichloride	500 g	5
25.	amyl acetate	500 g	5

```
5
                                                500 g
26.
     ethyl acetate
                                                            1
     Kit for micro-grid preparation
27.
                                                           10
                                                100 pcs.
     BEEM capsule, I.D. 8mm
28.
     gelatine capsule, Lilly Co., #00
                                                100 pcs.
                                                           20
29.
     carbon red for evaporation, 5 mm/ x 100 mm
                                                           50 pcs.
30.
                                                            2
31. chromium metal for evaporation
                                                  25 g
32. tungsten wire for evaporation, 0.5 mm/
                                                           10 m
33. tungsten basket for evaporation, 0.5 mm\phi
                                                           50 pcs.
                                                            3 roll
34. Pt-Pd wire, 0.1 mm/
     specimen grid:
35.
                VECO
                                         100pcs./pKg.
                                                            50
                   200 mesh
                                               11
                                                            50
                   300 mesh
                                               11
                                                           10
                   400 mesh
                                                             5
                4 slit mesh
                                                            1
                                                100/pkg.
36. filter paper, Toyo No. 7, 100 mm/
     disposable syringe, steril, 1 ml with
37.
                                                100/pkg.
                                                            2
     needle
                                                    11
                                                             2
                5 ml with needle
                                                             2
               10 ml
38.
     petri dish:
                20 mmø x 30; 90 mmø x 30
     measuring flask: 50 \text{ ml } \times 10; 100 \text{ ml } \times 10; 200\text{ml } \times 5.
40. graduated cylinder: 100 ml x 10; 500 ml x 5;
                           1000 ml x 5
     conical flask: 50 ml x 30; 100 ml x 30; 500 ml x 15
41.
     serological pipette: 1 ml x 50; 5 ml x 30; 10 ml x 30.
43. weighing bottle: 5 g \times 30; 10 g \times 30
44. negative envelopes
                                                 200
```

45.	Polystyrene latex particles (Dow Chemical)	
	10 % solid; 15 ml	
	0.109 ± 0.0027 u polystyrene	1
	0.234 ± 0.0026 u polystyrene	1
	0.357 <u>+</u> 0.0056 u polystyrene	נ

Equipment for specimen preparation

,	Minuscone, Nilson CDD Vo. 1	1
1.		_
2.	• • • • • • • • • • • • • • • • • • •	
	illuminator	1
3.	pH meter,; model M5	1
4.	kit for substrate membrane preparation	1
5.	balance	1
6.	sharp-point tweezers:	
	Dumoxel, rustless antimagnetic, #7	3
	Dumoxel, rustless antimagnetic, #5	3
7.	dental forceps, stainless steel	5
8.	incubator for polymerization	3
9.	deeminizer; model B-10	1
10.	stand for gelatim capsule	10
11.	jig for tungsten basket making	ı
12.	refrigerator; Hitachi model R-2126	1
13.	deep freezer; -90°C	1
14.	lamp stand; fluorescent Z light	2
15.	electric heater	1
16.	magnetic stirrer; Toyo MS-16B	2
17.	vacuum cleaner; Hitachi model C-V270	1
18.	Repairing tools:	
	circuit tester; SANWA model 501 ETR	1
	tool set; model S-5	1 set
	electric machine tool set; model	
	DL-10D	l set

専門家の待遇問題及び他国の医療面に於ける協力状況 11月7日,前原臨時大便,外務省通口事務官及び調査団隅田調整員の3 名は、コスタリカ国外務省を訪問し、QUINONES技術協力課長と会談, 概ね下配内容の質明を得た。

①専門家の待週問題

専門家の特権、免除等については、R/D 5条才3項オ1及びオ2号により、オ3国又は国際連合の様な国際機関より派遣される専門家にあたえられる特権、免除等と同等若しくは同等以上と規定はしているもののその主たる具体的細目については、次の通りである。

- ①専門家の所得(OTUAよりの在勤港本手当)に対する所得税は免除する。
- 回専門家及びその家族のPERSONAL EFFEUTS のコスタリカ国持 ち込みについては、一切、無税扱いとする。
- ○専門家所有の車輛の持ち込みについては、1台限りにつき無税扱いとする。
- ●専門家及びその家族へのコスタリカ国の医療サービスは、謂る FREE MEDICAL SERVICE とはまいらぬが、コスタリカ大学 より好意的な申し出があり余程高額の医療費負担(1,2万ドルの 場合)でない限りは、同大学で無料にて行う。
- 砂首都サンホセ市に於ける住宅状況(但し外人専用)が芳しくない事もあり、コスタリカ側としては住宅の提供は一切行なわないが(住宅費も負担しない)INFORMATION SERVICE を行い、コスタリカ大学の責任で速やかに住宅の斡旋を行う。
- ○地方への公務出張の場合のTRANSPORTATION CHARGE は、 コスタリカ大学にて負担する。

- **①専門家の携行機材については、輸入税等一切の税を免除する。**
- の専門家には、コスタリカ外務省より INTERNATIONAL MISS-ION の身分証明書(外交官に準ずる身分証明)を発行する。

②他国の医療面における協力状況

左記のQVINOES コスタリカ外務省技術協力課長によれば、「過去1年半の間(1973年11月上旬の時点からさかのぼって)には、如何なる国からのOFFICIAL DONATION (COOPERATION)もない。現時点での日本との協力関係が唯一のものであり、しかも今後他国より協力を受け入れる具体的なプロジュクトも存在しない」との説明であった。

又、厚生面については、「国連より同国の家族計画(この中には、人口 調査及び地方の健康管理等も含まれているが)に450万ドル(コミットベース)の協力があり、その一部は既に実施中である。更に、本計画 の遂行に関し、中華民国より3名の専門家が在コ中である」との事であった。 コスタリカの一般医療事情

•

a



コスタリカの一般医療事情

今回の医療協力契施調査団の主目的は云うまでもなく、電子顕微鏡供与に関しコスタリカ側の受入れ状況を調査する事であったが、今後日・コ協力の為に出来るだけ参考になる様な資料や、データをこの機会にあつめる事は有意義な事であると思われたので各団員協力してその収集に当った。その内医療関係、及疫学調査等に必要な文費として

- (1) Catalogo de la escuela de medicina 1969
- (2) Estadísticas de salud No. 1 1968
- (3) Algunas características de los egresos hospitalarios.

 Costa Rica 1968, 1970
- (4) Egresos hospitalarios segun institucion Y distrito de residencia
- (5) Ministerio de agricultura Y ganaderia Servicio Meteorologico de Costa Rica

を入手する事が出来,さらにほぼ全紙大の地図百数十枚からなるコスタリカ全土の詳細な地図を購入する事が出来た。この地図は、おそらく日本に於いてははじめてのものと思われ大変貴重なものであるが、いずれもO.T.U. Aに保管され今後有効に使用されるものと期待される。そこでこれら入手文献の内容はそれぞれの文献にゆだれる事とし、ここでは、滞在中に知る事の出来た情報を紹介する事にする。

1) コスタリカの医学教育

コスタリカ大学医学部は1962年に現存する古い歴史をほこるHospital San Juan de Dios を母体とする大学病院と共に設立された歴史の新しい当国唯一の医学教育機関である。当国人口約200万に対し現在約1,400人

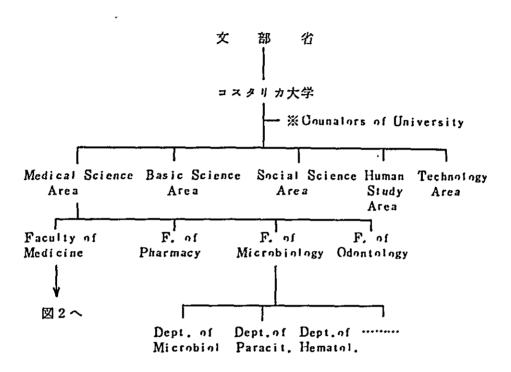
の医師しかいない為,その医師不足はやはり深刻と思われる。そこで当国の 医学教育についてふれたい。

コスタリカでは国家予算の約5が教育にふり向けられていると云われているだけに日本の小・中・高校に当る6年間+5年間の教育費は無料である。これを終えた後、コスタリカ大学へ応募するのは約1万人と云われ、その内6千人ほどが入学する。医学部には、Pre-medical course (日本の医 進教養コース)に200人ぐらい入学するが、卒業時には100~120名しか残らぬ様である。さてことで医学部に於ける医学教育についてふれる前に、コスタリカ大学について少し述べたい。

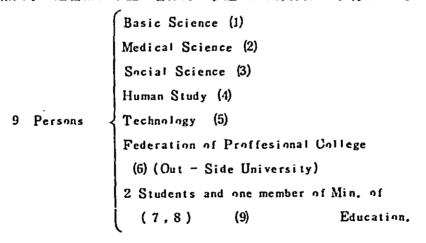
1) コスタリカ大学

コスタリカ大学は図1に示した如く5つの大きな部門に分れる。そして医 学部門がさらに4つの学部に分れている。

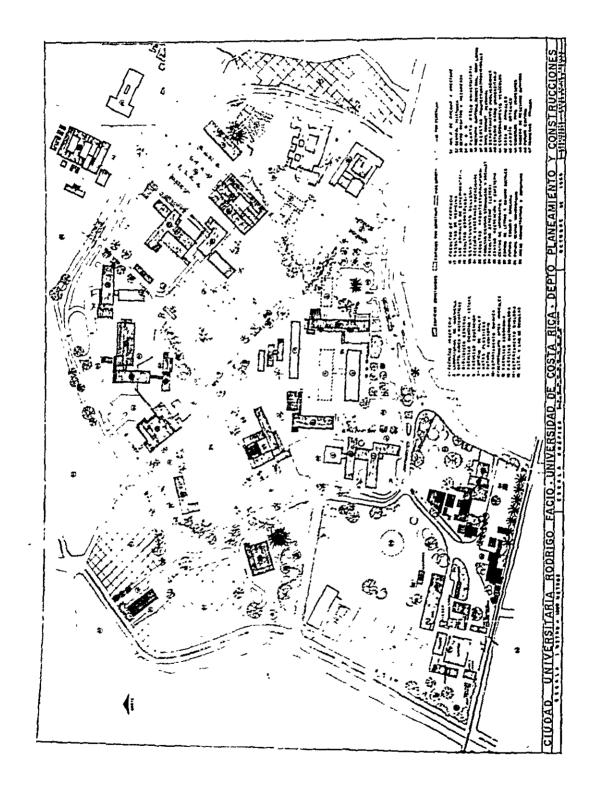
即ち医学部、蒸楽部、歯学部そして微生物学部である。との最後の微生物学部が我国ときわめて異る所で、この微生物学部の教育内容は我国に於いてはすべて医学部で行われるものである。



※大学の運営は、下記の各分野より選ばれた代表により行われる。



各学部長は各Professor に学生25 労を加えたもので選挙される。



その為コスタリカに於いては、Medical doctor に clinical doctor と Laboratory doctor の 2 つがある点は注意を要する。さて、コスタリカ大学はキャンパスがサンペドロにあるが、ここで大学の運営は Councilors of University と云う学生 2 名を含む各分野の代表 9 名からなる委員会により民主的に行われている。(ここであらかじめことわっておきたい事は、今回の調査に於いて、判ったのであるが、現在のコスタリカは色々の面で改革が行われているさ中であり、大学の機構や運営方針等も次々と変化しつつある為、この報告書の内容も現在多少変っている事もあり得る点である。)

ii) コスタリカ大学医学部

医学部は次の様なコースで教育を行う。

- · Pre medicine (2年間) 日本に於ける教養課程で国語,心理学,社会学,化学,生物学,物理学etc. の教育を受ける。
- · Medical School
 - 1年目 解部学,生理学,生化学
 - 2 年目 薬理学,寄生虫学,微生物学,病理解部学,の他に病態生理 学を含む臨床医学の教育がなされる。
 - 3,4年目 すべて大学病院での臨床教育を行う。コスタリカに於いて は大学病院は、厚生省下の病院と、Seguro Social下の病院(図3参照) で兼ねている。

図2医学部の機構図であるが、注目したいのは、日本に於いて独立している科が、内科、外科等に含まれている点である。

4年間の医学教育を終了すると1年間のインターン制度がある。これは日本でもかつて行われていたものに近いが、むしろアメリカのインターン制度と考えた方が適切であろう。ことで学生ははじめて1ヶ月120ドルの月給をもらう。この1年間がすむと次はSocial Service といういわゆる公衆衛生活動又は避地診療と云ったduty がある。あらかじめ1ヶ月の実施トレーニ

ングの後、全国各地のサニタリーユニットル1ヶ年派遣される。(サラリー1月400 ドル)これがすむと次はレジデント3ヶ年がある。ことで各専門分野の教育を受ける。もちろん医師であるので月給約300 ドルが支給される。ことでようやく専門医として自分のすきな道を歩きはじめるわけである。ちなみに1人前の医師の給料は月800~1,200ドルくらいであった。前述の如くインターン後は月給が支払われるが学生の80岁は何らかの奨学金を得ている為、教育を受ける側は比較的めぐまれている。

iii) 看護婦, 檢查技師, X 線技師教育

看護婦には2種あって

- Professional Nurse ········ 高校卒後3年間教育(主として医学部附属で教育される。年間約20名と Social Security Nursing School で教育されるものあり)。
- ・Non-Professional Nurse …… San Juan de Dios Hospital 附属の 学校で高校卒後1年間教育される。

さらに助産婦となるには

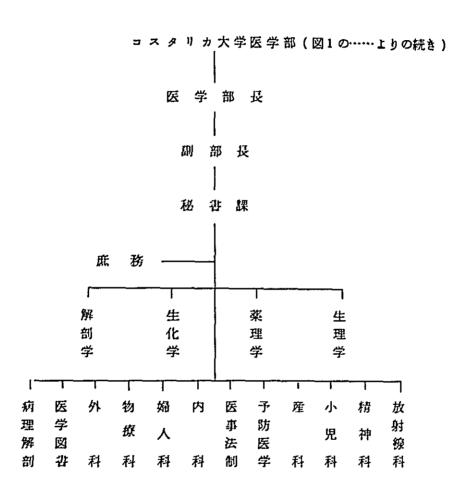
- · Professional Nurse の場合、1年間の専門教育。
- ・Non-Professional Nurse の場合,6ヶ月間の専門教育がなされる。 しかし乍ら,この国もやはり看護婦不足で,その対策に色々苦労の多い様で ある。次に,検査技師,X線技師であるが,まだこれらは,各部門で養成し ているにすぎぬ様で将来に期待している様である。

2) コスタリカの医療制度

コスタリカの医療制度は前にも多少ふれた如く必ずしも簡明ではない。目 下改革を加えつつ整備統合中と云うのが実状である。

そとで実際にコスタリカで病気になった場合について考えながら、その事情にふれてみたい。まず病院であるが、次の三つに大別される。即ち,

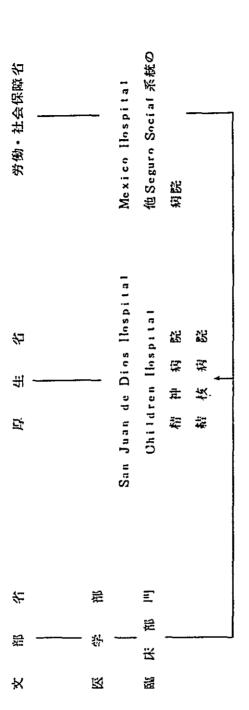
- ① San Juan de Dios Hospital を代表とする。厚生省管轄下の病院
- ② Seguro Social (社会保障制度…日本の健康保険の様な制度を含む)



内科学に含まれる科として,

皮膚科,神経科,心臓科,内分泌科,胃腸科,血液科 外科学に含まれる科として,

必尿器科, 眼科, 耳鼻科, 整形外科, 麻酔科があり, 日本の様に独立 していない。



矢印の府院が災質的に大学和院の役割をはたしている。

図3 大学病院の説明図

系統の病院

③ 個人病院

である。さて、ことで少し Segurn Social についてふれてみると、この制度は目下国民の62 男まで普及し、今後国民全部に及ぼしたいと云う制度であるが、すべてのサラリーマンが加入する様に法律で定められている。そこで給料の5~10 男と云う高い率の掛金をとられるが、これと引きかえにカードがあたえられる。そしてこのカードの所持者はすべて Segurn Social 系の内院で無料で診療を受けることができる。所で厚生省下の病院ではこのカードは適用しない。どうしても受診したいときは有料である。一方この厚生省下の病院ではサラリーマン以外で(即ちカードを持っていない人)低所得者は無料で診療を受けられる。即ち Charity Hospital の性格を有する。

反面, 高給取りでサラリーマンでない人は Segurn Social 病院は受診出来 ず, 有料で厚生省下の病院に行くか又は, 個人開業医に行くしかない訳で, ややとしい感がしないでもない。もっとも, 前述の如く目下改革中で将来は すべてのHospital を Segurn Social 1 本にしぼり, 国民皆保健に持って行 くとの事で, その時は開業医は自然消滅するであろうと云われている。なか 余談になるが各病院の財際に少しふれてみると,

厚生省下の

San Juan de Dios Hosp. ……厚生省、1部大学(文部省)
Children Hosp. ……1部 Seguro Social
1部 宝くじ
1部 酒・タバコ税
精神病院
TD Hospital
Seguro Social 系
メキシコ Hospital
ブンタレナス Hospital etc.

と云う風に必ずしも簡単でない。まあこれも前述の諸事情によるためであ ろう。

3) 一般の医療事情

コスタリカは、中米では下層階級の少い国と云われる通り、その教育熱心 な点とあいまって医療に対する力の入れ方も大きい。

医療養成の所で少しふれた様に地方にあるサニタリーユニットを通じ公衆衛生的な調査,あるいは栄養状態の改善のための給食,又貧しいゆえに起りがちな人口増加による悪じゆんかんを防ぐバスコントロール指導,等, 落実に改革がすすんでいる様である。我々が滞在中コスタリカ大学の医学部のセスペデス教授及微生物学部のモレラ教授の案内で国内の田舎を視察した際もこれらの実際を見ることが出来た。即ちコスタリカ国の気候が高温多湿のため,各種の寄生虫がきわめて多く重大な公衆衛生上の問題となっている由で,我々が視察したある田舎の小学生は貧困による栄養障害に加えて寄生虫による両方の原因の貧血がみられ, 瞼結膜の貧血,毛髪の視色化とましていた。又貧困のための子だくさんを示す如く,7~8人の兄弟のグループが数組みられた。いずれも将来は熱心な改革策が実をむすぶであろうと思われ期待される。



次に公衆衛生上での問題として予防接種があるが、次の如く実施されている。

B.C.G ……生後1年目に全新生児に実施 ポリオ生ワクチン……・ツー回 生後1~2ヶ月 オニ回 オー回後3ヶ月目

三種混合……ポリオ終了後,引き続き施行

その後適時に麻しんワクチンを行っている。 種痘は行っていない。 外国渡 航者のみ。

医薬分菜は完全でなく、ほぼ日本と同様で薬局に於いてもほとんどの医薬 品が購入出来る。もちろん医師処方箋による薬剤の購入も出来る。

4) 日本の医療協力の問題点

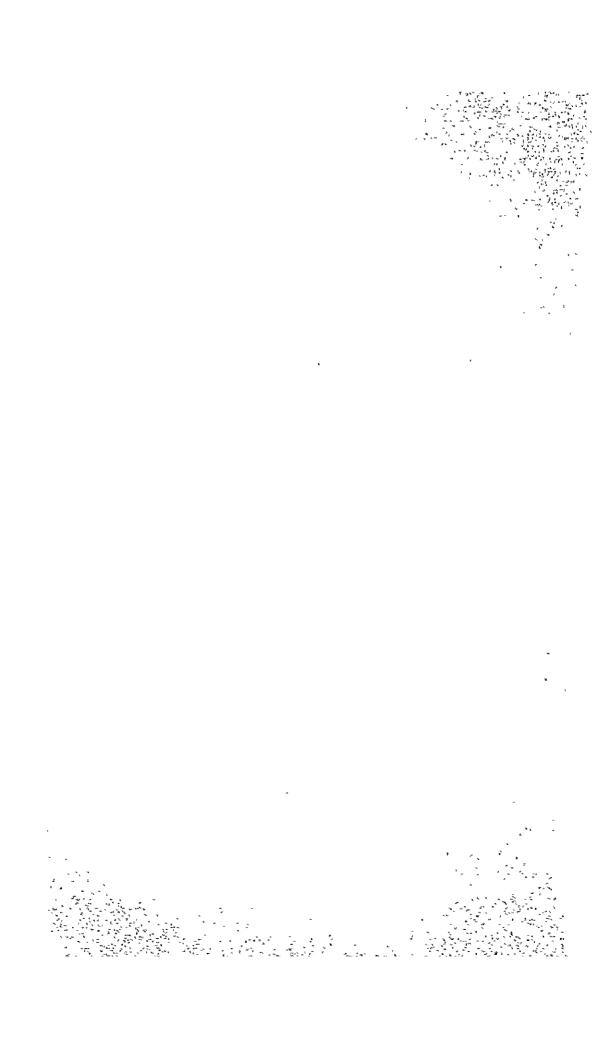
上述した諸事情で幾分御理解頂ける如く、コスタリカ国はアメリカ合衆国に近いため、同国医師の臨床レベルはある面でかなり高くアメリカ合衆国のみならずメキシコ病院の名でむわかりの如く、メキシコや南米の医学会との交流もさかんである。その為、病院に於けるインターン、レジデント教育等はむしろ日本もまねるべき参考にすべき所も多々あると思われる。唯、卒直な所基礎医学に於いて多少アンバランスな所もある様で、それらの所に我国で出来る協力がある様に思われる。

今回の調査で特に印象を受けたのは、熱帯地での寄生虫問題であった。前述モレラ教授は昨年日本に於ける寄生虫学会の特別講演者として来日し彼の発見したコスタリカ住血線虫について、すぐれた業績を発表したが、その後の問題として、生態学の判明した今、次には免疫化学を応用した臨床的診断法の確立、詳細な疫学調査を実施し、その分布の把握と、他の寄生虫病を含めた技蔵対策まで熱心に検討を加えている。そしてこれらの面での強力なサポートを外国に求めている。この問題をもし日本の対コスタリカ医療協力をして、とらえた場合、これが結実して、コスタリカ国民の間に寄生虫による貧血、さらにコスタリカ住血線虫による恐ろしい病者がなくなれば、その与

える効果は単に医療協力と云う範囲だけでなく,真に国際親軽に寄与する所が多いものと思われた。いずれにしろ,との国の知的レベルはきわめて高く,生はんかな協力では,かえって逆効果ともなりかねず,その実直で,真整な,そしてきわめて親日的な国民性を見るにつけ,日・コ医療協力が本当に実のある豊かな協力であってほしいと心から思った次才であった。文末になったが,深井団長の引いた今回の調査団で我々の受けた印象はきわめて強烈であった。一台の電子顕微鏡の為に全学がほとんど一日中,その有効な利用について熱心な討論をくり返し,又いたる所で本当に科学をする人々のまじめな情熱に出合うことが出来た。特に深井団長の相手国側に与えた感銘は多く、さらに当国の日本大使館の各位の全面的かつ強力な支援と協力は有難かった。又,〇.T.C.A の隅田団員,外務省の樋口アドバイザー等の全員のチームワークで全行程が実のあるものであった。医療協力のむずかしさは反面,実に豊かなみのりをもたらしてくれるものである。この項を終えるにあたり日・コ親密がますます深まる事を心から望む次才である。 (山田 記)

ť

医療協力実施調査団関係者リスト



医療協力実施調査団関係者リスト

(コスタリカ側)

コスタリカ国大統領

~ SENOR JOSE FIGUERES FERRER

コスタリカ国才一副大統領

~ SENOR DOUTOR MANUEL AGUILAR BONILLA

外 務 大 臣

~ SENOR GONZALO J. FAULO

外務省技術協力課長

~ SENORA WILDA QUINONES

文 部 大 臣

~ SENOR PROFESOR ULADISLAO GAMEZ SOLANO

厚 生 大 臣

~ SENOR DOUTOR JOSE LUIS ORLICH

厚生省衛生局長

~ SENOR ELIECER VALVERDE

コスタリカ大学学長

~ SENOR EUGENIO RODRÍGUEZ

コスタリカ大学評議会議長

~ SENOR DOCTOR ALFONSO TREJOS

コスタリカ大学医学部部長

~ SENOR DOUTOR RODRIGO GUTIERREZ

コスタリカ大学医学部病理学教室HEAD

~ SENOR DOUTOR RODOLFO CESPEDES

コスタリカ大学医学部生理学教室HEAD

~ SENOR DOUTOR FRANCISCO URENA

コスタリカ大学農学部ウイルス学研究室HEAD

~ SENOR DOCTOR RODRIGO GAMEZ

コスタリカ大学酸生物学寄生虫学教室HEAD

~ SENOR DOUTOR PEDRO MORERA

コスタリカ大学生物学部ウイルス学教室HEAD

~ SENOR DOUTOR JOSE M JIMENEZ

メキシコ病院院長

~ SENOR DOCTOR SAEED T. MEKBEL

その他関係者多数

(日本側)

日本大使館

 大
 使
 人
 見
 鉄三郎
 氏

 一等書記官
 前
 原
 勝
 也
 氏

理 事 官 石田惣二氏

(その他)

HITACHI SALES CENTROAMERICANA

PRESIDENT ~ 兼 先 輝 堆 氏

VICE PRESIDENT ~ 山田修平氏

関係参考資料

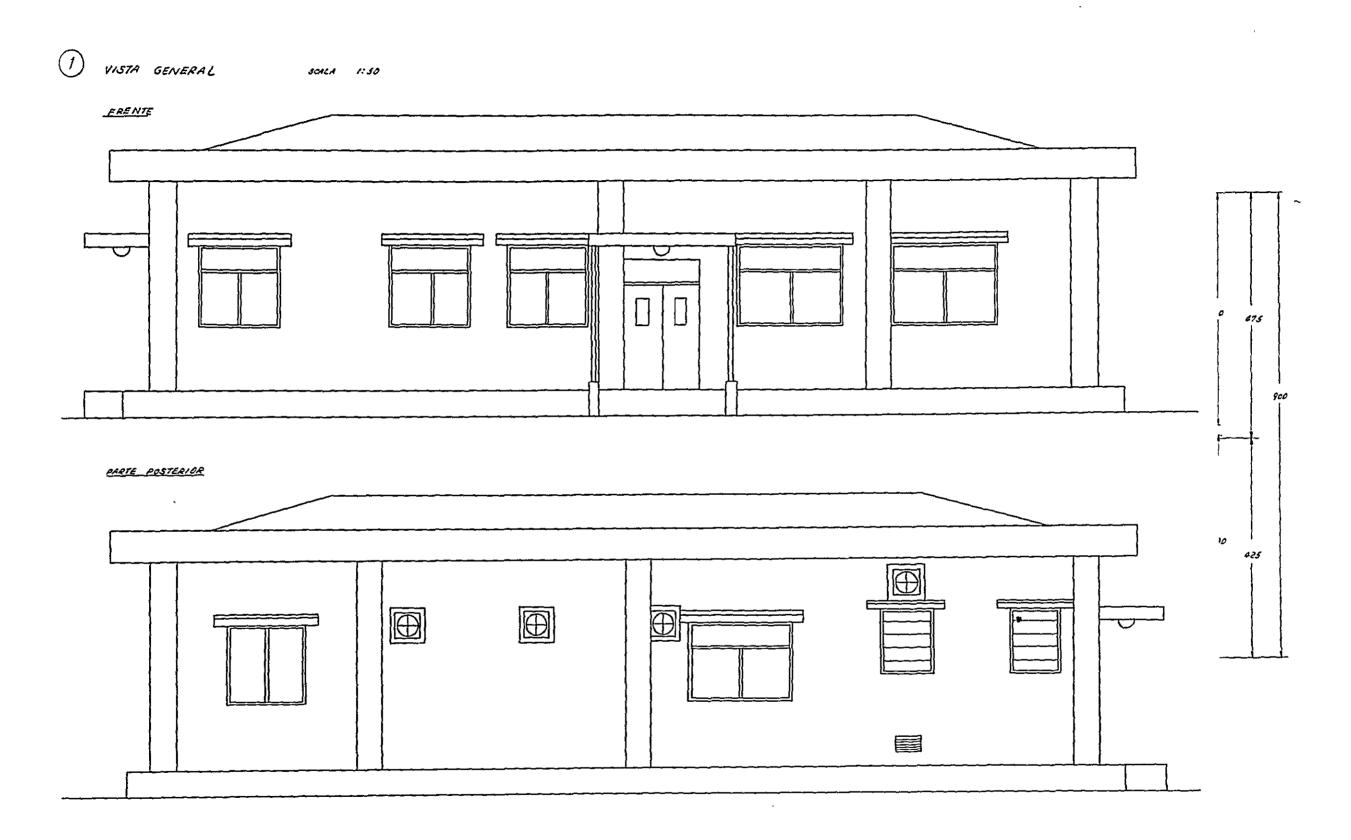


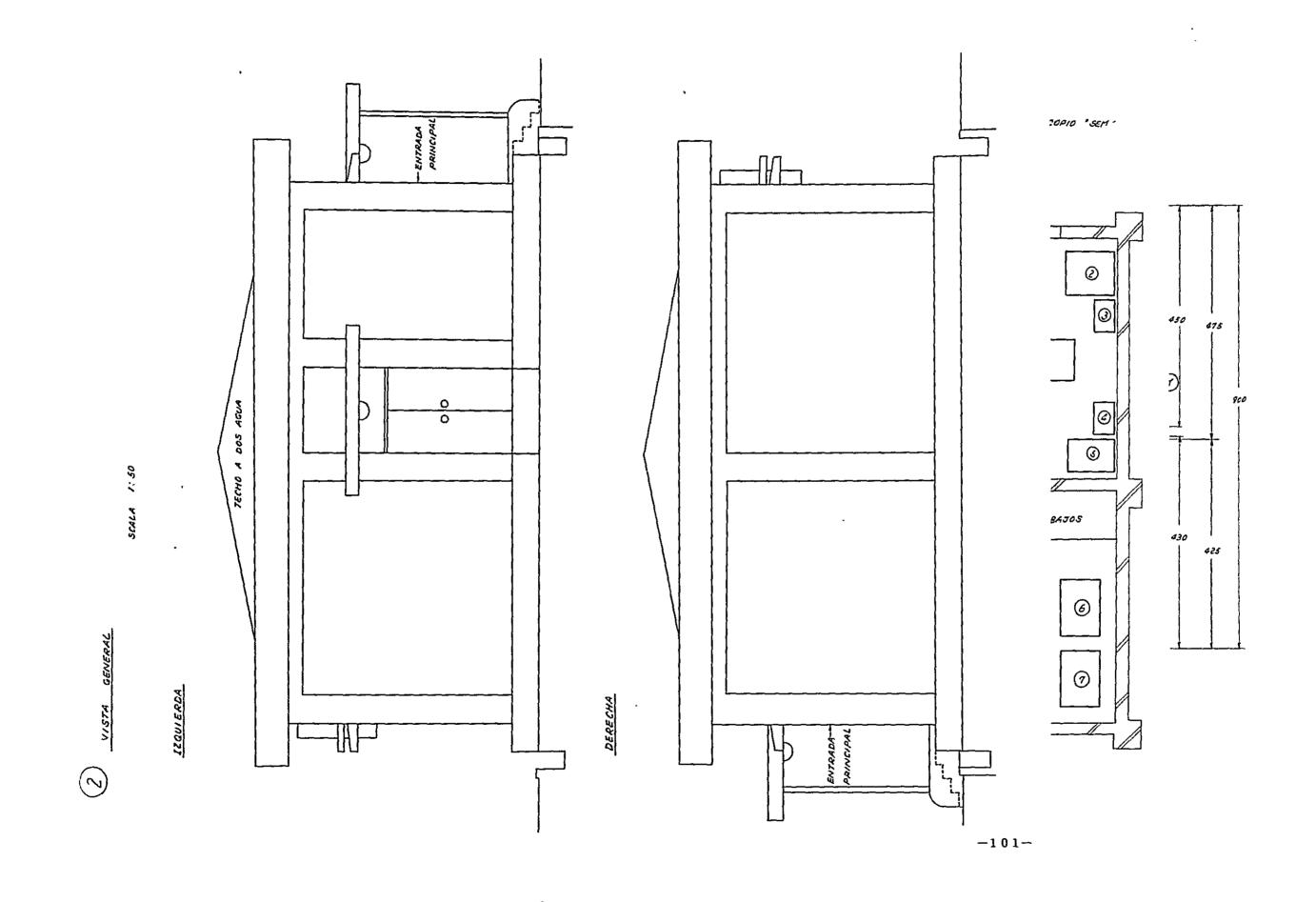
PLANO DEL LABORATORIO

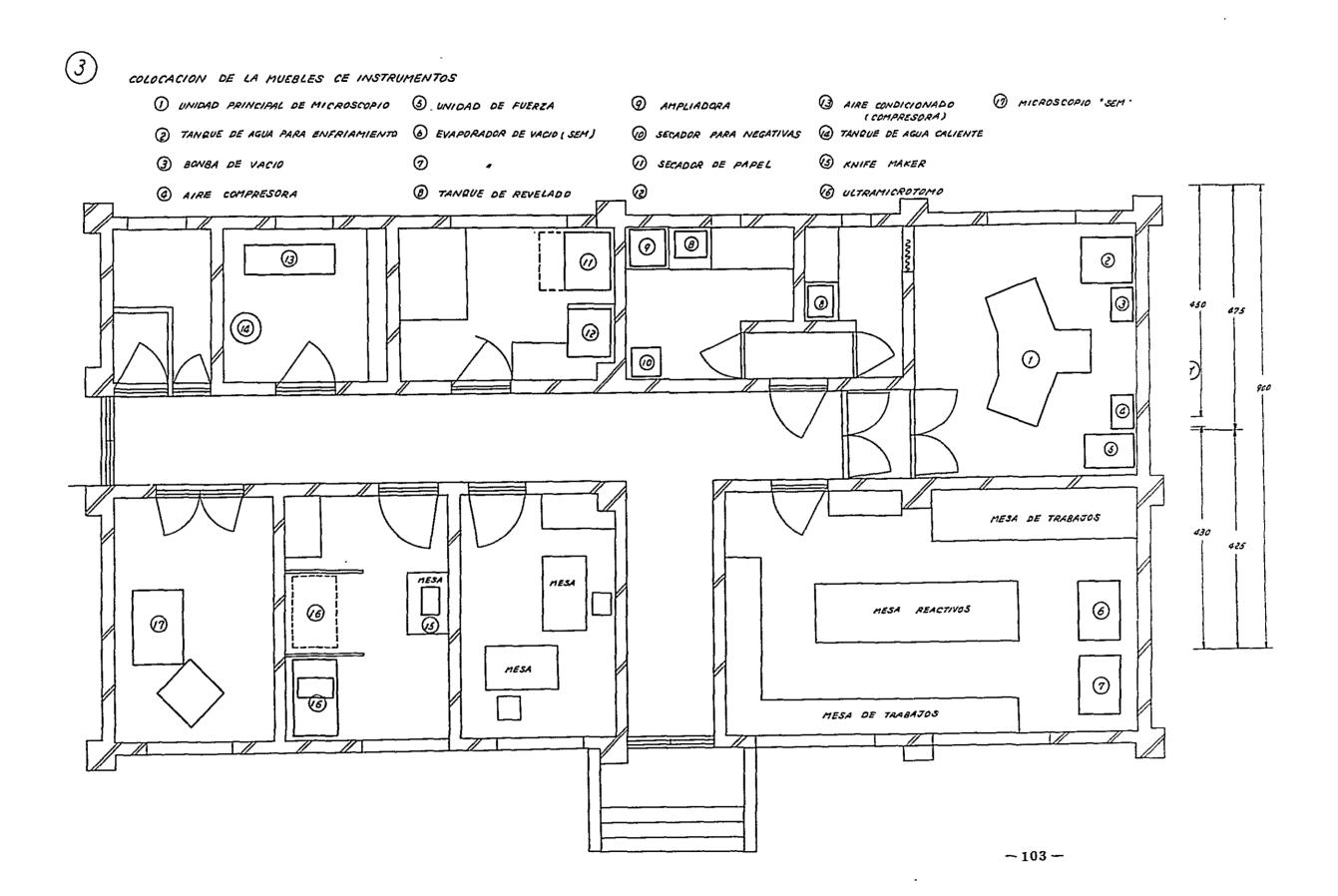
DE

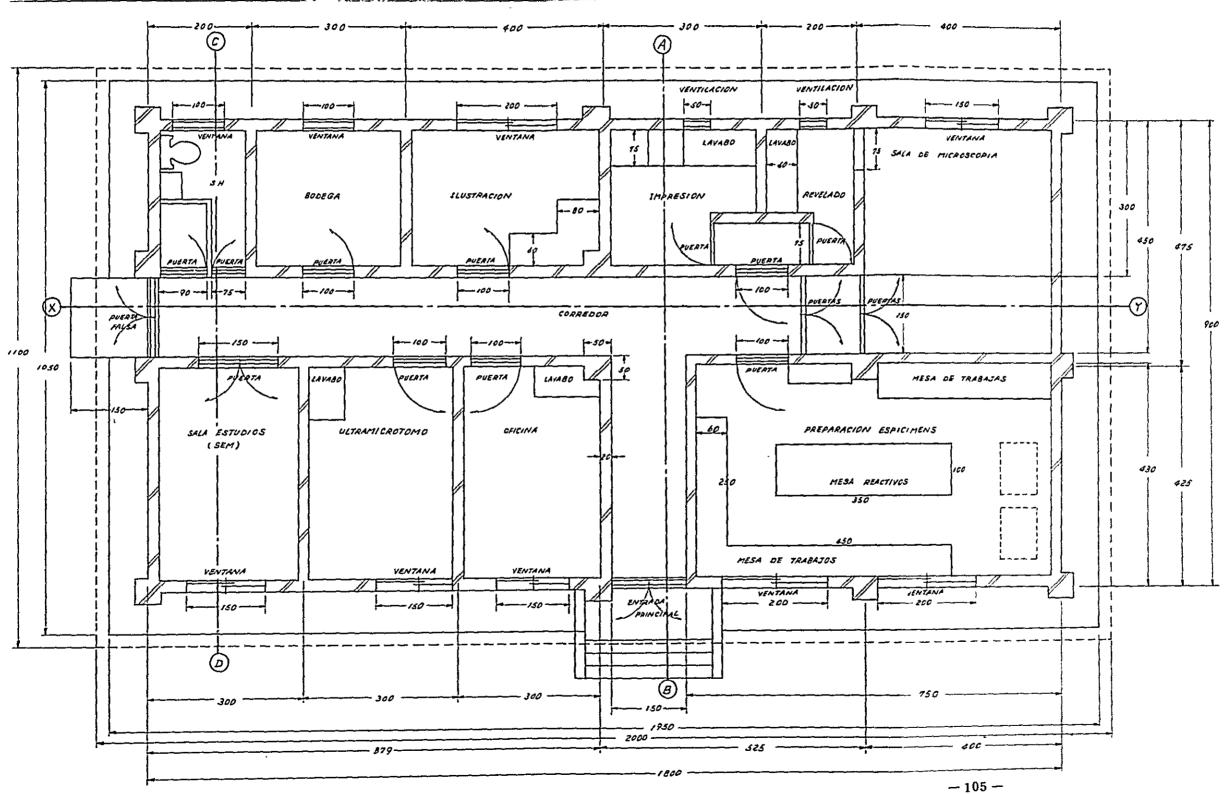
MICROSCOPIA ELECTRÓNICA

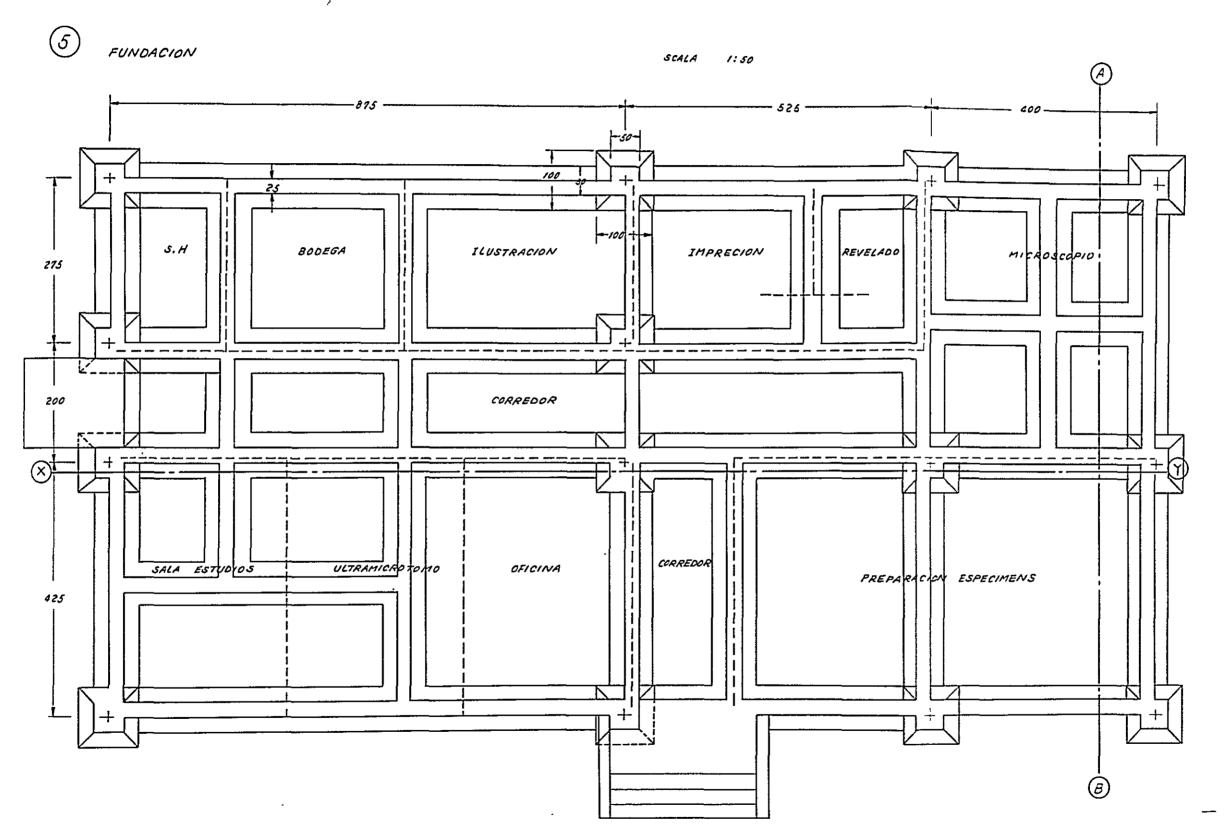
(UNIVERSIDAD DE COSTA RICA)



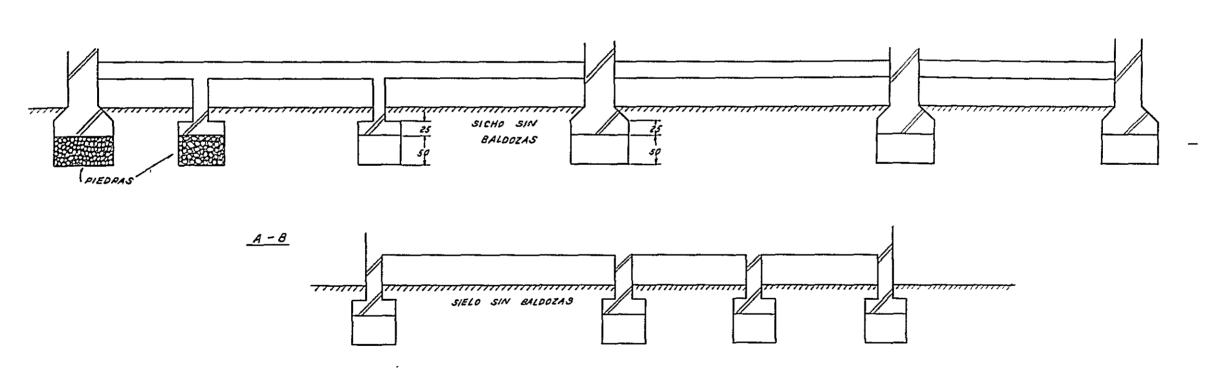


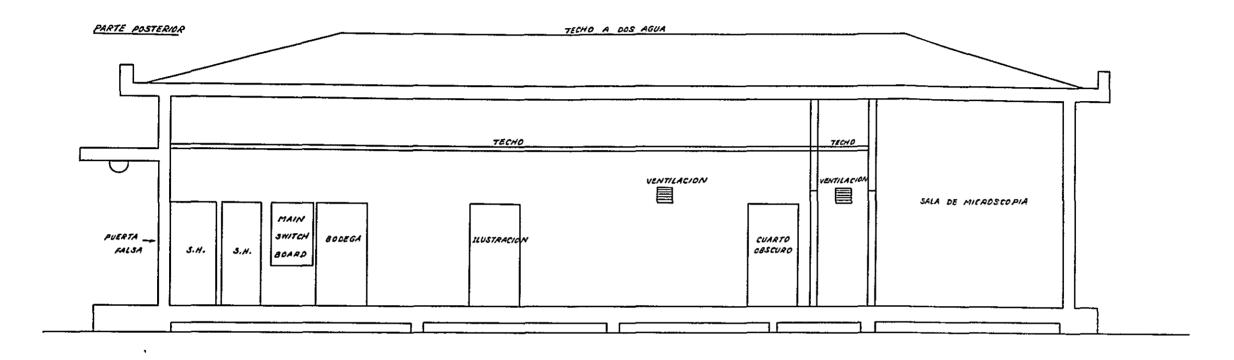


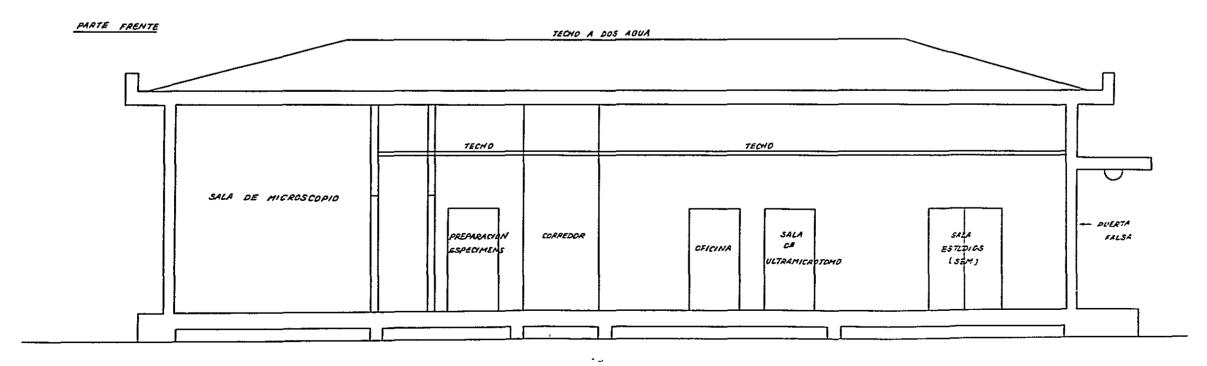


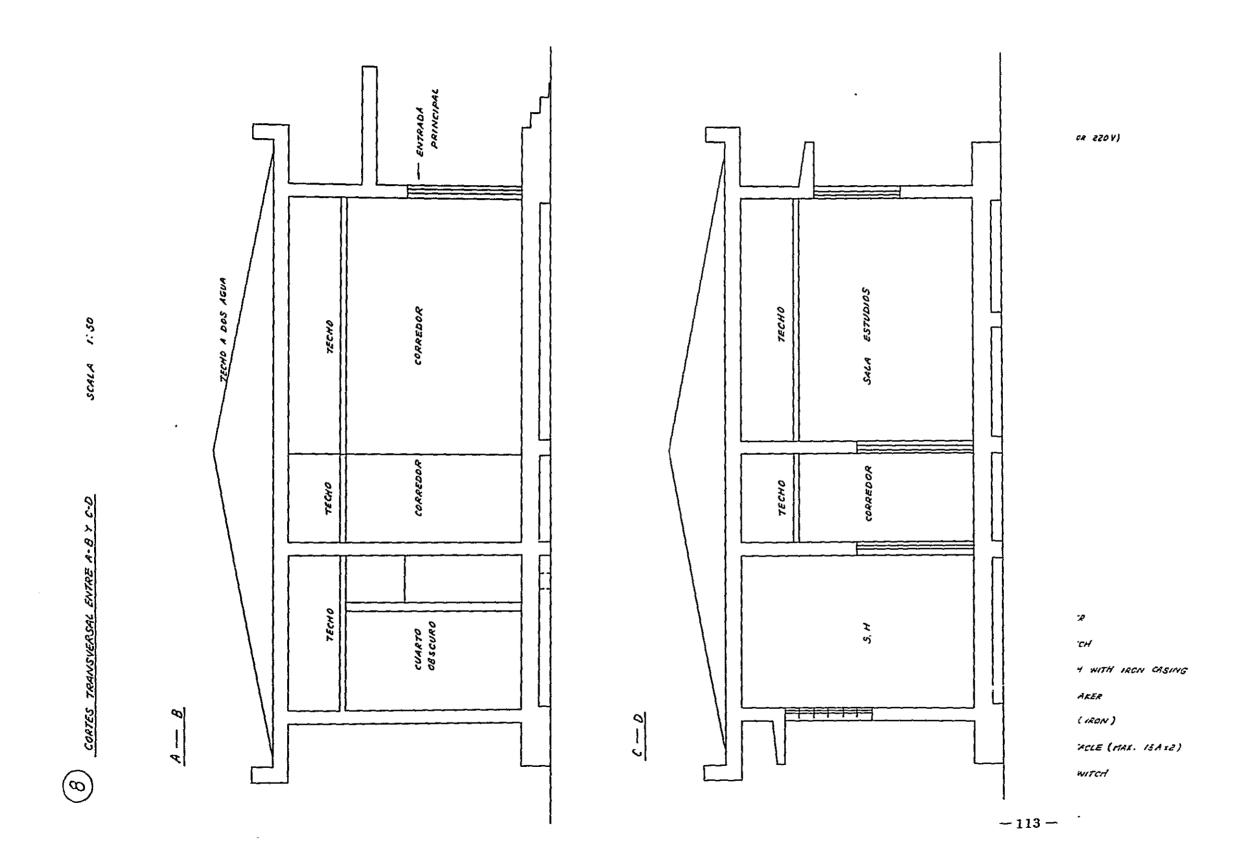








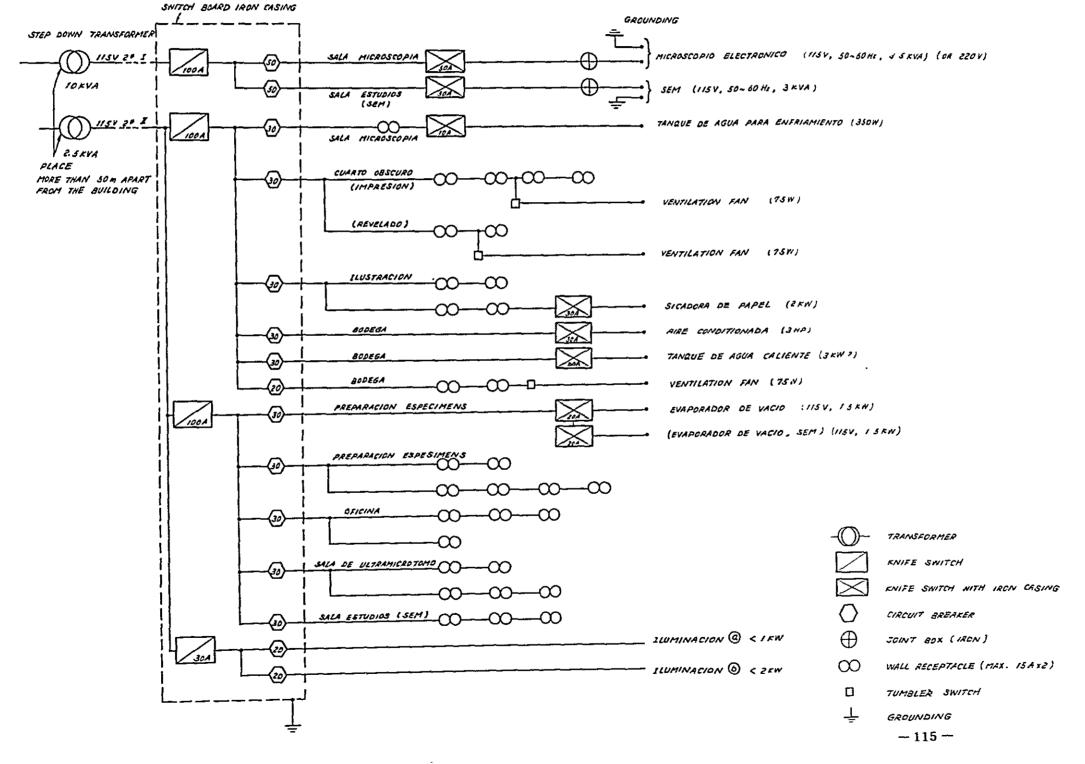


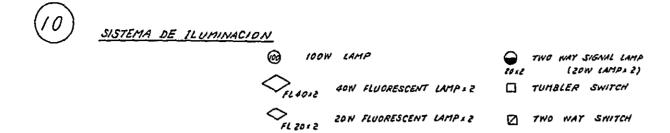


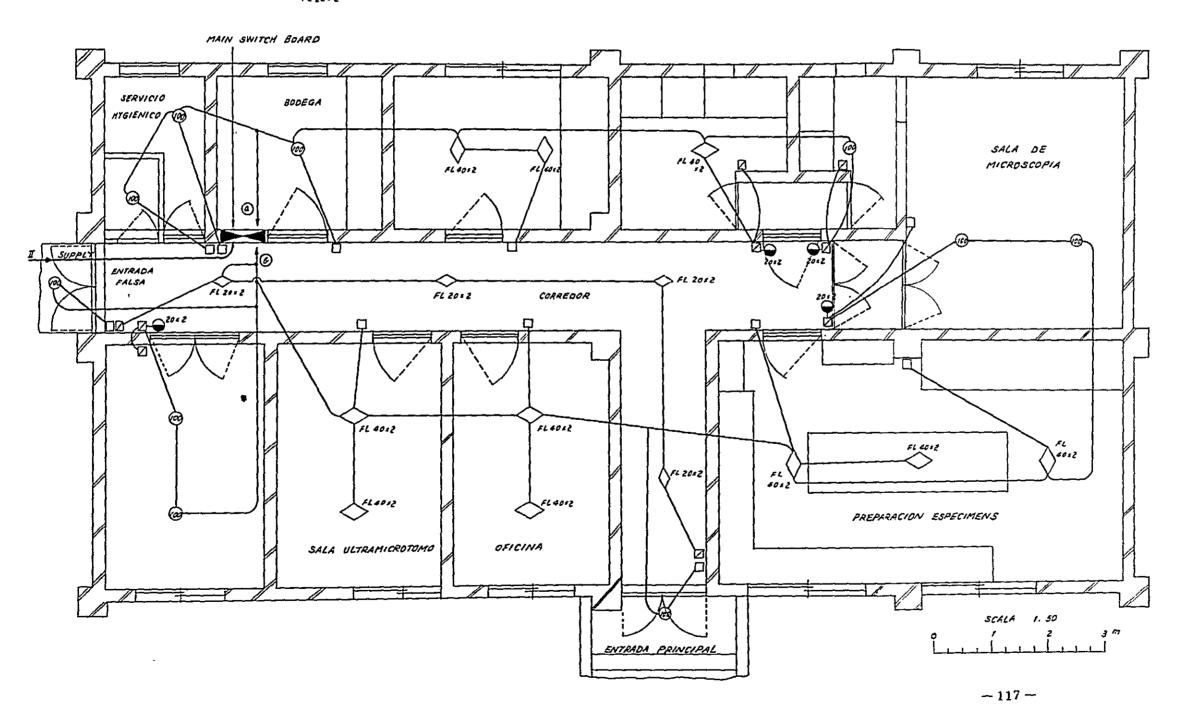
, a

ALL WIRING MUST BE IN METAL CONDUIT TUBING TO MINIMIZE STRAY MAGNETIC FIELD.

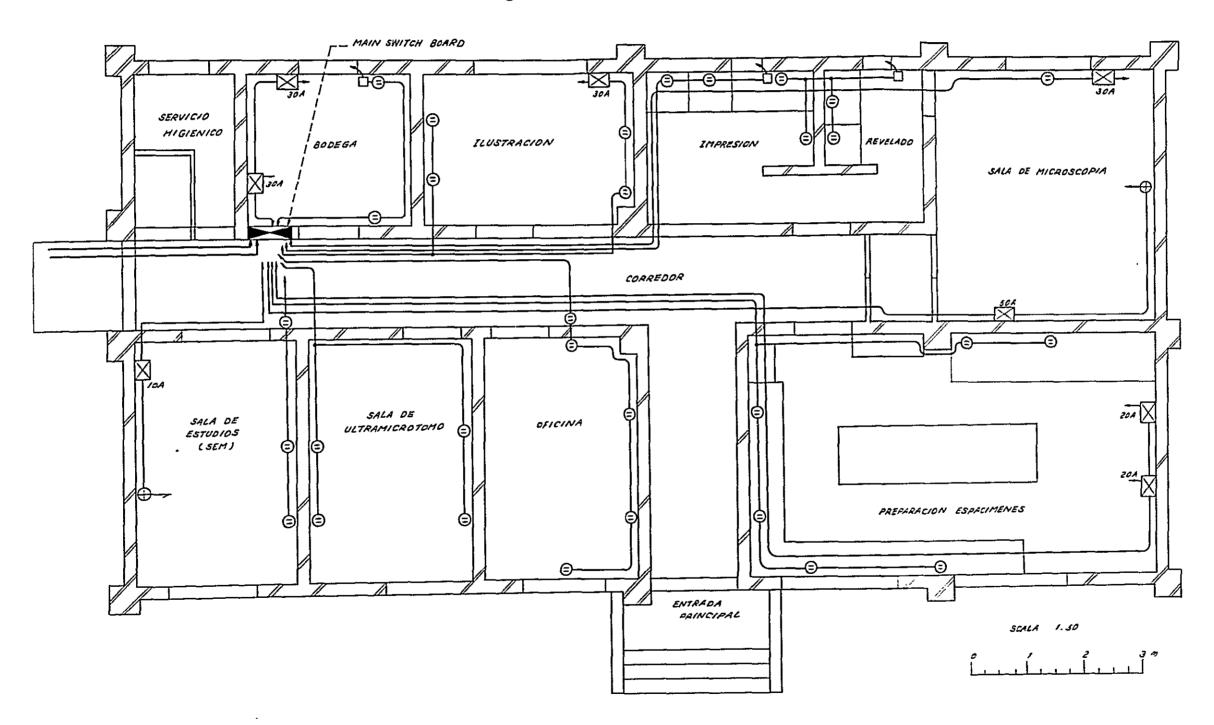
CONDUIT TUBING SHOULD BE GROUNDED COMPLETELY.

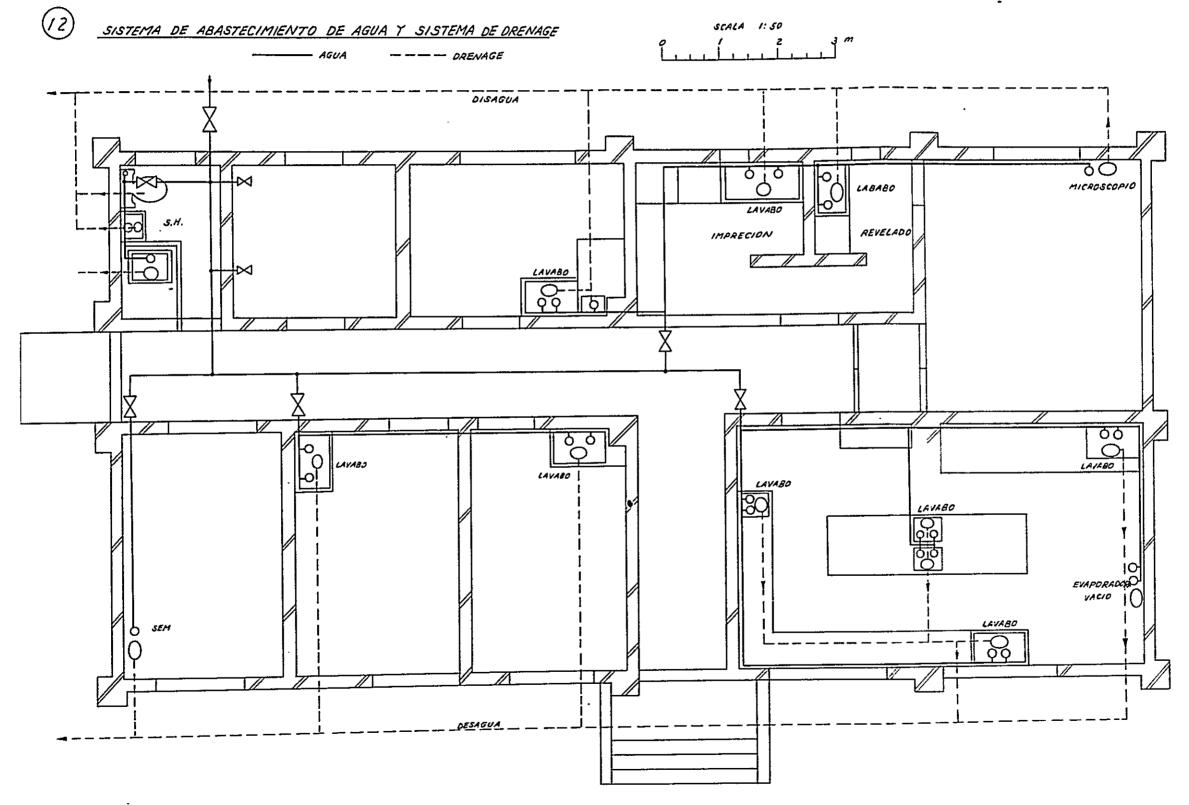




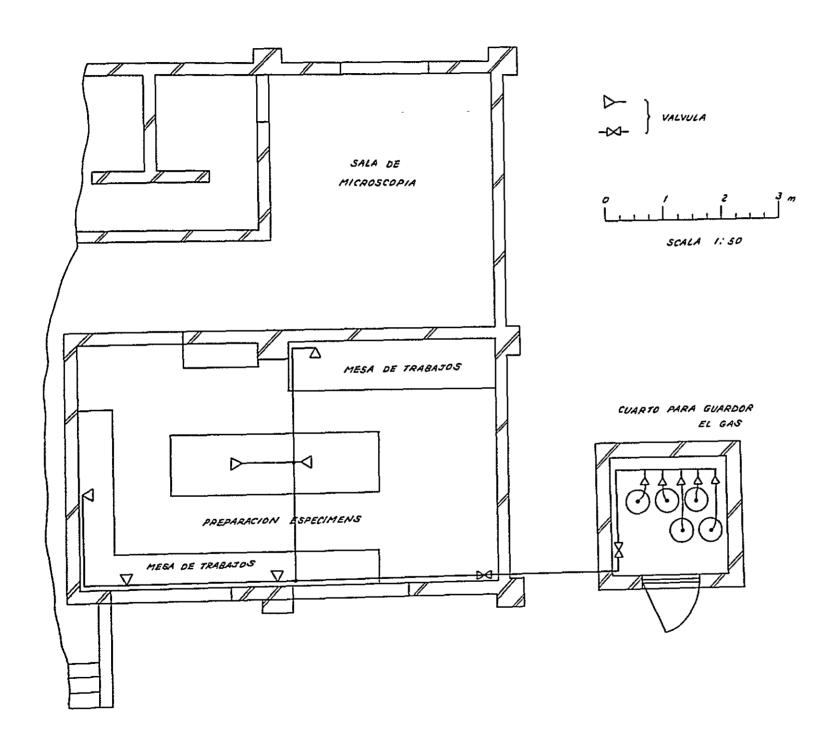


- KNIFE SWITCH IN IRON CASING
- D JOINT BOX (IRON)
- (WALL RECEPTACLE (MAX. ISAIR)
- . ISAIZI | TUMBLER SWITCH

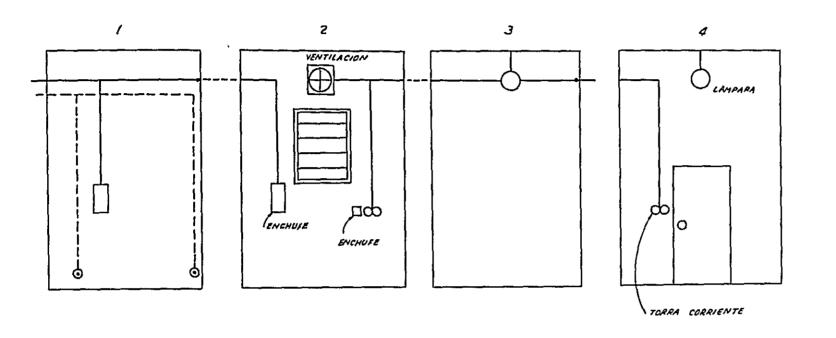




- -



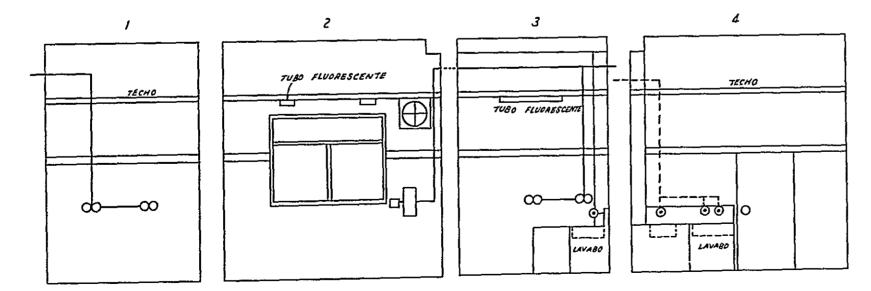
S. н.	14	A 3 4 BODEGA	J-B-3 A ILUSTRACION	14P)	RESION 2 - 3	REVELADO 1 - D - 3	SALA MICROSCOPIO
SALA ESTUDIA 3 - F	, ,	ULTRAMICROTO 3 - G 2	1			PREPARACIA 3 - I	ON ESPECIMINS

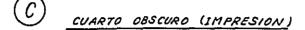


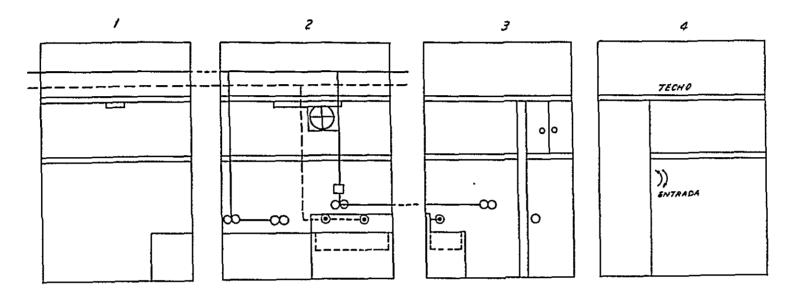
---- ABASTECIMIENTO DE AGUA

_ LINEA ELECTROMOTORIZ

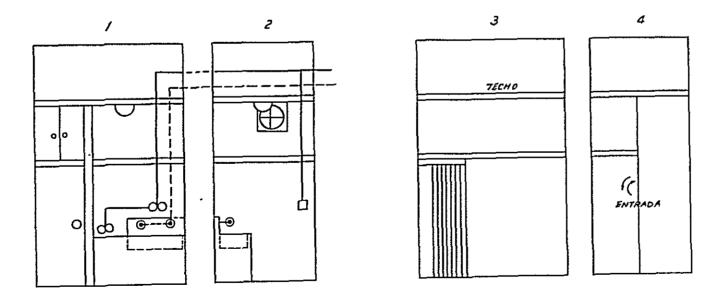
B ILUSTRACION





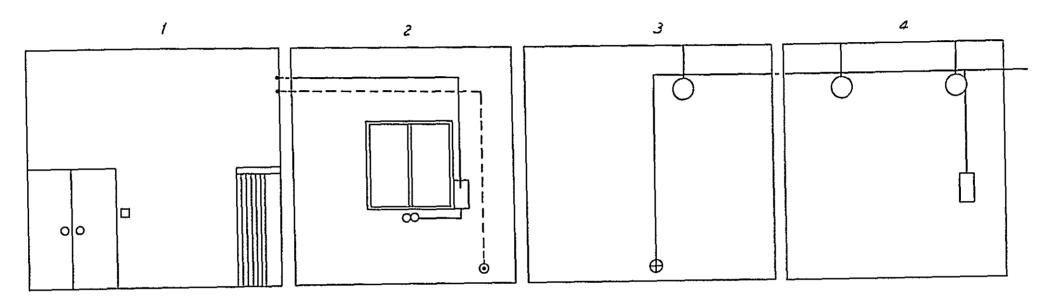


D CUARTO OBSCURO (REVELADO)

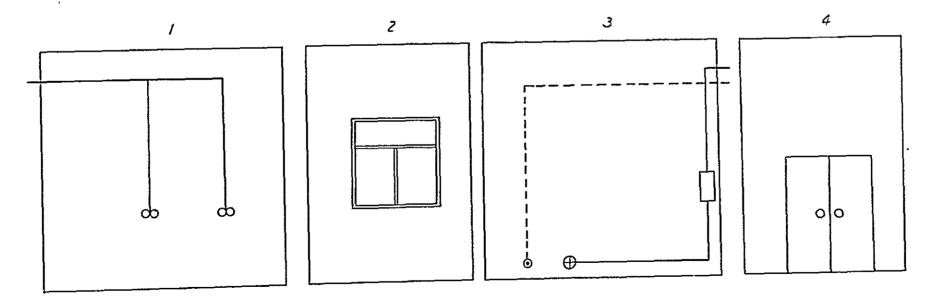




SALA DE MICROSCOPIA



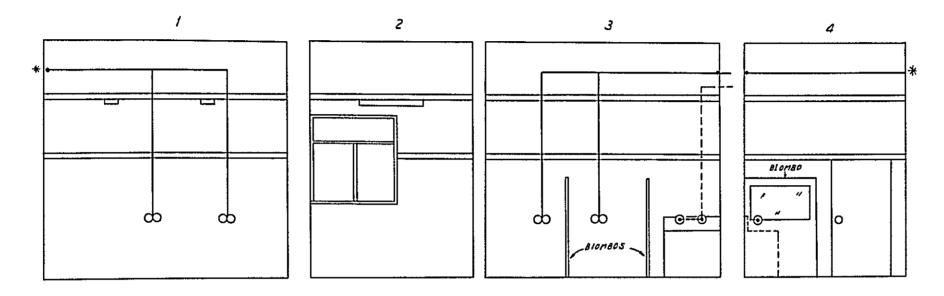
F SALA ESTUDIOS (SALA DE SEM)



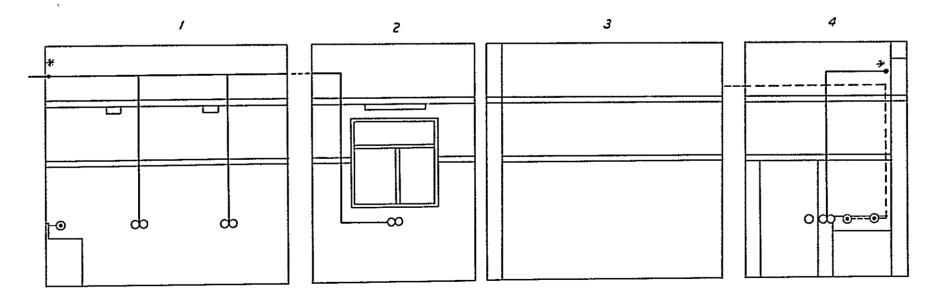
18 G

SALA DE ULTRAMICROTOMO

SCALA 1: 50



H) OFICINA

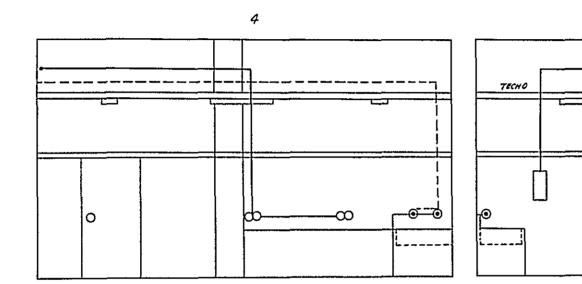


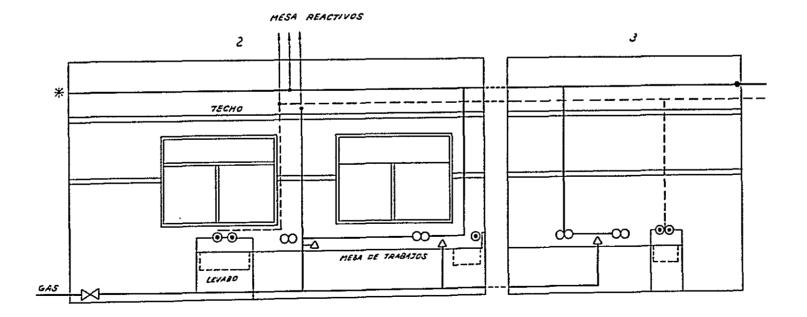
19



PREPARACION ESPECIMENS

SCALA 1:50







CONOZCA COSTA RICA GUIDE TO COSTA RICA

TABLE OF CONTENTS

THE VISITOR

General Characteristics — charm — bits and pieces Getting here — documents — airlines, etc., automobiles (also leaving)

Climate - seasons - what to bring - umbrellas, etc.

What to wear

Hotels - Apartments

Medical advisers and advice - emergencies - hospitals

Churches

Shopping for the Visitor - souvenirs, etc.

Useful information — safe water — system of streets — how to use the telephone book — names in Costa Rica — money (rate of exchange)

Restaurants and Eating - specialities

Sightseeing and trips — daytime trips — overnight trips

Communications — mail — post office — telephones — long distance, etc.

Automobile repair - accidents

Newspapers — magazines — in English and Spanish Local transportation in San Jose — to other parts of Costa Rica

THE RESIDENT

Living in Costa Rica - what part - Moravia, Escazu, Downtown, etc.

Househunting

Furniture and Household effects - what to bring for not) appliances

Schools

Servants

Pets

What to call it and where to find it

Spanish Lessons

Emergencies - Household repairs, electricity, water, medical, accidents

Clubs - what to join

Libraries, bookstores

Shopping Guide reference

How to become a resident / pensionado -- absentee voting -- work laws

History

Government

Economy

Customs, traditions, legends

ACKNOWLEDGEMENT

Grateful acknowledgement is made to the following North American women whose generosity in contributing their time, talent, suggestions and experience made this book possible: Luann Vaky, Suzy Kreis (artwork), Goldie Steffarud, Vi Smith, Alice Greene, Joyce Beck, Ferol Senter, Mary Rodgers, Bobbie Kallmeyn, Joyce Kline, Evelyne Todd, Helga Tellings, Mary Ann Gilstrap, Gail Johnson, Nancy Quinn, and Mavis Biesanz,

San Jose, Costa Rica, May 1972

If Costa Rica is your home,
We hope to guide you with this tome
Or, if you're simply visiting
And touristly aquisiting,
What to do and where to go
To do it, you will shortly know.

When you have read what we've compiled By scenic wonders be beguiled! CONOZCA COSTA RICA fully Nicoyan ranches wild and woolly; The charms of San José, and, too, The beaches, mountains, Irazú And Arenal, the lakes of Poás The undulating lava flo as.

So, join us in the market place!
Come along at leisured pace
And we will spare you from the task
of searching out the things you need
From Artesanía to Zinnia seed . . .
And other things you never thought to ask

s.K.

PART I

The Visitor

GENERAL CHARACTERISTICS OF COSTA RICA

Costa Rica's most important tourist attraction is the ambiente - the atmosphere, the social climate and natural beauty found here. Many a casual visitor has returned to this delightful country to establish residency for work or retirement after taking part in the open, relaxed and friendly way of life in San Jose. Among the attractions found here, several stand out: courtesy and helpfulness to visitors; lack of class-consciousness -a direct result of the high level of education: a mixture of nationalities and cultures which results in a sometimes charming, at other times frustrating, blend of industriousness and efficiency with the "mañana" philosophy -a casual attitude toward schedules and deadlines. The people are truly special here, their pride in country balanced by an open democratic system which not only allows, but encourages, participation and constructive dissent in civic and national affairs. The interest and cheerful manner of the visitor will be repaid in kind, you may be sure..

Physically, Costa Rica is breathtakingly green, a garden spot where flowers and fruits abound, where the principal crops, coffee and bananas, flow over hillsides and along the coasts and multi-growing seasons insure productivity. From tropical coast on two oceans to grasslands where cattleranching thrives to jungled rainforests in the interior, the scenery is interesting and varied. San José is located on the Meseta Central (a "table"—plateau) surrounded by rolling green mountains and low foothills which boast a real country atmosphere 20 minutes from central San José with lovely views of the valley below. Costa Rica is, truly, a gem of many facets —worth discovering for yourself, precious to encounter.

The narrow streets of San José seem designed less for traffic than to display hundreds of signs advertising each small shop. But, take heart, for recent renovations of the main arteries make cross-town travel a bit less leisurely and an eventual plan for a circunferential highway remains, at least, on the drawing board. Walking the city is fun, for there is always something new to see, and many small cafes offer a refreshing fruit drink and excellent coffee.

For visitors and residents alike, the ambiente is the key. One enjoys and feels carefree and relaxed under the Tico sun...even, for that matter, in the rain!

TRANSPORTATION TO AND FROM COSTA RICA

If you choose to drive into Costa Rica, the rewards are many: a sweeping view of the varied peoples and terrain of Central America; the opportunity to observe small town and rural life before entering the heavily populated Central Plateau; a leisured transition between cultures and climates, people and places.

Essentials for entering Costa Rica

By Car. (See also Automobiles). In addition to a vehicle in good repair (for the roads are only generally good although plans for improvement are being carried out), you will surely wish to have on hand: a camera to record your trip; a thermos or cooler to allow for rest stops at whim; a phrase book if you do not speak Spanish... a few words go a long way in making friends. Camping and travel with a trailer are possibilities for experienced travellers. Essential documents are: Passport and Visa — Driver's license — Health card — U.S. Insurance — third country clause (good for 3 months).

By plane. Flying into San José may be scheduled non-stop from Miams by LACSA, the national airlines. This company offers, in addition to fine service, a friendly introduction to Costa Rica by Costa Ricans (or, as we say, by "Ticos"). Other airlines flying into San José are: COPA, PANAM, SAM, SAHSA, and TACA. Arrangements for either

non-stop or "hopping" flights may be made through agents or the Airlines. Essential documents are: Passport with Visa or Tourist Card (the latter good for 1 month may be extended) — Health Card.

Transportation within Costa Rica. If you do not have your own car, this may be arranged through tourist agencies (for side-trips to the volcanoes, to the coast, etc.). Within San José: taxis are inexpensive; efficient and the drivers are courteous; bus transport is good provided you are not fussy about crowds during the busy hours of the day and know your destination; small planes may be contracted to fly within the country provided that weather conditions are suitable. In short, getting around should not prove a problem; one's hosts or hotel will be most happy to assist. (see useful information).

CLIMATE:

Warm, without being suffocating in the coastal and lower regions, temperate in the Central Valley (San José) and cold in the high parts (volcanoes), all of Costa Rica in general is pleasant and is considered by visitors as the land of eternal spring. The average temperature in San José is between 60 and 80 degrees Fahrenheit.

Hot and tropical on coasts, Summer-like weather at 2000 feet. Spring-like weather at 4000 feet, Fall like weather at 6000 feet and over,

SEASONS:

There are two. The dry season normally from December through April; May through November: it rains almost daily. The big rain months, in the plateau area (4000 ft. level), are June, September and October. Total rainfall at this level normally is 70 inches or more, annually; Atlantic coast around Limon 130 inches; Quepos, in the Pacific about the same; Northern Caribbean coast of Barra del Colorado, 188 inches annually.

Normally temperature changes very little throughout the year. During the rainy season most mornings are warm and sunny with rains starting about noon or by 2 p.m. December is the coolest month, March and April the warmest. Along with the dry season there are a considerable number of windy days.

The average temperature at the 4000 ft, level is about 70 to 72 degrees Fahrenheit. On the coasts it is considerable warmer and in the high-lands considerably cooler. Midday at either season can be very warm at any altitude but, by 4 p.m. or a little later, you will find yourself reaching for your sweater.

Like weather everywhere —the unexpected can happen, so, especially if you are a tourist, come prepared for the unexpected—in other words, what the books didn't tell you.

CLOTHING

Anything you are comfortable in and enjoy wearing in the States, you can wear here. This includes bikinis and pant outfits of any kind. Clothing of wash-and-wear materials and easy-to-travel-with clothes are ideal for here. Women do not wear hats and gloves anymore.

Almost without exception a warm sweater or light to medium weight coat can be worn in the evenings year round, If you come as a tourist, include an all-weather coat and a sweater in your wardrobe your might like to include several scarves to protect your hair from the wind and rain or tie around your neck for added warmth when necessary.

You will need umbrellas, during the rainy season. If you forgot to bring one, don't despair—you can buy them here for as little as \$ 1.50. Plastic raincoats and rainboots are seldom seen, but you might find a light cloth raincoat useful.

If you wish to dress up in the evening for dinner at a restaurant, a long skirt and blouse or dressy pant outfit are highly acceptable. However, not necessary. The general rule is: wear what you like with few exceptions. At receptions etc. at the Embassy Residence you would expect to "dress up" a bit more. Much would depend on the type of function you are attending.

There are a few restaurants where men are expected to wear coats in the dining room Bermuda shorts are rarely, if ever, seen on the streets in San José. You might find them useful at private clubs and beach areas.

Men wear light-weight worsteds, wash and wear, gabardines, etc. Dark colored suits are preferred, and white is never worn except in the port cities. Heavy winter clothes and topcoats are seldom if ever needed, Men's suits imported from the United States are available but higher in price than they are there.

TEMPORARY LODGING

Now that you have planned your wardrobe and made your reservations, where are you going to stay? Following is a list of suggestions with comments which may help you decide.

HOTELS AND APARTMENTS

Apartamentos Lamm, Ave. 1a., Calles 11-15 21-49-20

Apartotel Los Yoses, Los Yoses 25-00-33 Furnished apartments, conveniently located Not too expensive.

Furnished apartments, conveniently located Not too expensive. Holland House, Barrio Escalente, 25-14-74

Moderately priced, a bit out of town. Comfortable. No apartments.

Hotel Ambassador, Paseo Colón, 21-81-55 Attractive furnished apartments, conveniently located.

Hotel Chorotega Tower, Calle 29, Aves. 2/8 25-25 55 Primarily a tourist hotel.

Hotel Balmoral, Calles 7/9, Ave. Central ,22-50-22 Primarily a tourist hotel.

Hotel Centroamericano, Avenida 2, Calles 6/8 21-33 88 Primarily a tourist hotel.

Hotel Costa Rica, Calle 3, Avs. Central/2 21-40-00

Primarily a tourist

Hotel Europa, C Central, Avs. 3/5 22-12-22 Has a swimming pool.

Hotel Tennis Club, Sabana Sur 22-15 88 Furnished apartments, swimming pool, and tennis facilities.

Hotel Plaza, Cs. 2/4, Av. Central

Primarily a tourist hotel.

Hotel Presidente, Cs. 7/9, Av. Central 22-30-22

22-55-33

Primarily a tourist hotel,

Hotel Royal Dutch, C. Central, Avs. 0/2 22-14-14 Primarily a tourist

Hotel Sheraton, Av. Central, Cs. 12/14 21-30-45 Primarily a tourist hotel.

Motel Berno, Sabana Norte. 21-68-29 Furnished apartments near Pan American Highway.

Hotel frazů, Pan American Highway 22-84-11 Attractive rooms, Swimming pool, Bus service to downtown,

Hotel Crystal
Pan American Highway.
22-34-76

Attractive rooms Swimming pool. Bus service to downtown.

TRAILER PARKS

The trailer traveller arriving in Costa Rica from the North will find the following accomodations along the way to San José^{*} Liberia, El Delfin, 4 miles north of Liberia, All hook-ups available, Large swimming pool, Very good restaurant.

Cañas, La Pacifica Trailer Park, east side of Pan American Highway, All hook-ups, Swimming in the river, Restaurant,

Alajuela, Yeluka Trailer Park (on old Pan American highway). On the new road from San Ramon use Alajuela Exit. Follow Highway 11 approximately 10 miles to white church. Turn left to Highway 1 for several miles. Watch for Yeluka on left. The manager, Mrs. Slooten speaks English, Telephone 41-91-03. All hook-ups available. Bus service to Alajuela and San José. Costs S 2,00 U.S. per day, Special rates.

Alajuela. Inca Trailer Park, (fairly close to San José). All hook-ups. Located on marginal road North of Juan Santamaría International airport one block west of Fábrica de Embutidos "Tega". Telephone 41-21-04.

San José, (near San Pedro). Parking for small units is available behind the Ital Restaurant in San Pedro. Enter San José from the Pan American Highway by turning left at the Gulf Station at the edge of town. Follow Paseo Colón to downtown area, turn right one block to Second Avenue, follow it to calle 23, turn left one block, then right on main avenue. Pass the Auto Mercado on left. About six blocks farther on right is a sign "San Pedro, Guadalupe, Sabanilla". Turn left at nearby stop light and proceed 2 blocks to Ital Restaurant on right Hook-ups limited to electricity.

Tres Rios. Singing River Trailer Park, About one-half mile south of Tres Rios (about seven miles east of San José).

San Isidro de El General, Jorón Centro Americana, About 6 miles south of San Isidro, All hook-ups, Telephone 71-04-78,

Food supplies are available in supermarkets in Liberia, Alajuela, San José, San Isidro and in smaller shops and markets all the way. Butane gas (called Tropigas in Costa Rica) is available in most larger towns. A laundromat "Lava Centro" is located in downtown San José on Second Avenue opposite Parque Merced, near San Juan de Dios Hospital. MEDICAL

Adequate and reliable medical services are available in San José. There are many well trained, competent and reputable doctors, dentists, ophthalmologists, opticians and specialists practicing in the city. Most have been trained in the U.S. or Europe and speak English. The following are the Embassy Medical Advisors: Dr. Oscar Ortiz Ortiz Internist, 22-01-74. Dr. Rogelio Pardo Evans, Peace Corps Physician, 21-54-22 and Dr. Federico Sosto Peralta, 22-81-90.

HOSPITALS

Clínica Bíblica	21-54-22
Clínica Católica	25-50-55
Clínica Santa Rita	21-64-33

Hospital de Niños 22-01-22 Hospital San Juan de Dios 22 00 88

If your regular doctor can't see you, you can go to any of the clinics listed above for emergency treatment.

Eye glasses can be made quickly and accurately here. Contact lenses can be fitted but are not made here.

CHURCHES

The Roman Catholic Church is the predominant Church in Costa Rica and sermons are given in Spanish with the exception of St. Raphael Church in Escazú which has a Mass in English at 6:00 p.m. on Saturdays. English speaking Protestant services are held in the Union Church (an interdenominational group), Episcopalian Church, the Seventh Day Adventist, and the Methodist Church These Crurch: also conduct Sunday School classes for children and other activities normally supported by U.S. Churches. There is also a Jewish Synagogue in San José.

BAPTIST:	
Calle 19/21, Ave. 14	21-52 36
CATHOLIC:	
Metropolitan Cathedral In front	
of Central Park	21 38 20
Masses: 5, 6, 7, 8, 10, 12 noon	
4, 5:30, 7, 8 p.m.	
Nuestra Señora de Fátima,	
Los Yoses	26-67 78
Santa Teresita, Calle 25, Ave. 9	
	22 71 31
Masses: 5:30, 6:30, 8:30, 12 noon	
5:30 p.m.	
Church of El Carmen , Calle Central	
Av. 3, (nexto to U.S. Embassy)	22-14 35
Masses: 6, 7, 8, 10 a.m.	
5, 7, 8 p.m.	
EPISCOPALIAN:	
Church of the Good Shepherd,	22-15-35
Calles 3/5, Ave. 4	
Services	
(English): 7.30 a.m. Holy Comm.	

JEHOVAH'S WITNESSES:

Calles 4, Avenida 9

JEWISH SYNAGOGUE:

Calle 22, Avenida 1

Services: Friday - 6.00 p.m.

Saturday - 9.00 a.m.

LUTHERAN - (German):

Los Yoses, last entrance, 250 vs. South, yellow house on right side 25-27 26

10,30 a.m. Morning Prayer

LUTHERAN - (Spanish):

Curridabat

WETHODIST:

Calles 9/11, Avenida Central

22-03-60

MORMON:

Calles 33/35, Avenida 8

25.02.08

Sarvicas

(Spanish): Priesthood meeting: 9:00 a.m. Sunday School: 10:30 a.m.

Sacrament meeting: 5:30 p.m.

SEVENTH DAY ADVENTISTS: Calles 15/17, Avenida 10

HINION CHURCH:

Avenida Central No. 957, next door to Capri Theater 22-03 60

SHOPPING FOR VISITORS

One of the pleasant aspects of travel is shopping for souvenits to take back to family and friends. You might like to begin your shopping expedition in San José by visiting the Mercado de Artesanía located on Calle 11 directly behind La Soledad Church - this will give you a preview of Costa Rican arts and crafts.

Here following are favorite shopping spots for things typically Costa Rican:

Ox Carts - hand painted in a variety of sizes and colors, visit Costa Rica Souvenirs, Avenida 1, Between Calles 7 & 9.

Industrias Souvenirs, Avenida 1, Between Calles 7

National costume and replicas of same in all sizes as well as embroidered shirts and blouses may be found at the Casa Folklörica on Avenue 3 directly across from the Auto Mercado.

Wooden fruit, salad bowls, carving and paintings by local artists await you at -La Galería Avenida 1, corner of Calle 9.

Pre-Columbian artifacts, reproductions of indigenous pieces în gold, visit -Joyerîa Oscar Rodriguez-, located in the Gran Hotel Costa Rica.

Leather goods of all types, hassocks, rocking chairs, sandals, belts, etc., are available at El Caballo Blanco in Moravia, a suburb of San José.

If you are a stamp collector and prefer that type of souvenir, the Central Post Office has a philatelic office on the second floor. As you enter the Post Office, go up the stairway on the right hand side of the building

In case you ran out of time in some of the other countries and weren't able to do much shopping, see Michelle, Avenida Central, diagonally across from the Cine Capri -they feature items from

Costa Rica as well as other Central American countries plus Colombia and Ecuador, Novedarles Tipicas on Calle 3 between Avenidas 3 & 5 is another interesting shop that features items from all Central American countries,

USEFUL INFORMATION

Most foods in Costa Rica are safe to eat. As a general precaution, however, unpeeled fruits and vegetables, lettuce, tomatoes, etc. should be carefully washed. (Several drops of lodine to two quarts of water (color of weak tea) make a simple, sale solution). It is wise to avoid fried things sold on the streets or trains

The water is safe to drink in San José and the larger towns. Dos Pinos milk is homogenized pasteurized and delicious as well as safe, as are the other products of the same company.

Sometimes, in spite of precautions, travellers have upset stomachs and diarrhea. There are several effective remedies available in the drupstores, but it is wise to consult a doctor. (See section on Medical Adviserst.

Money: The Costa Rican monetary system is based on the Colon (and centimos), in 1973 one U.S. dollar was worth 8.57 colones. Since the rate of exchange may fluctuate, there is a printed chart attached to the cover of this book giving the current rate. Check the date on the chart, Personal checks for dollars and traveller's checks can usually be changed for colones at the Bank of America upon presentation or proper identification, and usually at hotels.

Tipping: is customary in hotels and restaurants. Most restaurants add 10% to the bill, but a few extra coins for special services are welcome.

It is considered correct to send flowers to your hostess for dinner or large cocktail parties, the first time you are invited to someone's home, or for special occasions. North Americans are expected to be fairly prompt (within a half hour) when responding to invitations, though our hosts are apt to be a little more relaxed about punctuality. Do not expect to eat dinner much before two hours after the time specified on the invitation.

Telephone Directories: are published annually and are quite helpful, ONCE you understand them, Last names are alphabetically arranged, followed by the surname of the mother of the head of the house (a Latin American custom) and then the Christian name. For example, the telephone book entry for your friend Guillermo Hernandez Soto would be Hernández Soto, Guillermo His mother (a widow) would be Hernández, María Martin v. (viuda) de Look at the first name listed and skip over to the Christian name (which is also in alphabetical order) to find the one you are looking for.

Getting Around on Foot or Otherwise:

Maps: Most hotel tobbies have folders containing maps of the city and surrounding areas. Bookstores (librer(as) like Lehmann, Universal, López and Valer(n have official maps in great detail for modest prices, A good map is an excellent friend.

Streets: A charming and at the same time exasperating feature of getting around San José is the system of streets and addresses. The epic center of downtown is the intersection of Avenida Central and Calle Central. Avenues (avenidas) run east and west. with odd numbered avenues north of Avenida Central (1, 3, 5 etc.) and even numbered avenues south of Avenida Central (2, 4, 6 etc.). The streets (calles), run north and south with odd numbered streets east of Calle Central and even numbered streets west (to 42nd street). Street names and numbers are posted on the corners of buildings. So far, so good, BUT taxi drivers and local people do not ordinarily use the numeration. They prefer to say "It's across from the Pulperia La Luz" or "It's 75 varas from la Casa de Matute Gomez", It took us several months to find out where the noble Matute Gomez had lived and where the obelisk used to be, since neither exists any longer, "Varas" are used to indicate distance and 100 varas means more or less a block. Any familiar landmark is used in preference to actual directions and a pulpería (small corner grocery) is preferred, with farmacias (drugstores) and cantinas (bars) running close behind. So fix your sights on a well-known pulperia and go forth fearlessly

Taxis: They are inexpensive and easily recognized by markings on the cars and by the yellow license plates. Rates are fixed according to distances travelled, but it is wise to check with the driver before setting off to avoid misunderstandings. Travel to and from most places within the center of town costs about & 3.50 (USS0.40). Travel to the suburbs from downtown varies between 6 and 8 colones and may go up to 10 colones if the hour is late or there is a heavy rain.

Buses: Until you've been here a while, you'll probably limit your excursions to walks around town or organized tours (see sightseeing). However, if you have time, an interesting and inexpensive way to see San José is by local bus. The fare within the city limits is only 20 céntimos (about 3 U.S. cents) and the rides are minimum of a half hour from the center of town to destination. Long rides cost a little more. The Central Bus Stop for most parts of town is in front of the Cathedral on either side of the park. There are inter-urban buses for nearby cities (see helmy)

Rental Cars and Buses: For out-of-town trips one can rent cars at the airport or the larger hotels. There are several well-known companies (Avis, Hertz, etc.). One can also take inexpensive inter-urban buses to Alajuela, Puntarenas, San Isidro even as far as Panama and Guatemala (Tica Bus, Tracopa, etc.). Minibuses can also be rented as well as large buses

(Jorge León), drivers are available,

Trains: There are several trains a day to either Limón, on the Atlantic Side or Puntarenas, on the Pacífic side. The inexpensive train ride to Limón on the Ferrocarril del Atlántico (7th Avenue near 23rd Street) is a scenic marvel and should be enjoyed at least once by every visitor to San José (don't expect luxury, and take your own lunch as the trip takes between six and eight hours). Trains leave at 8:00 a.m. and 12 Noon, There are confortable hotels in Limón (Caribe, International, Park; make reservations in advance) and you can fly back the next morning on LACSA, in Limón you can sometimes see sloths (upside-down hanging animals) or the island first sighted by Columbus "La Uvita". On the trip down you'll see plantations of coffee, bananas, sisal, cocoa and coconuts.

The trip to Puntarenas is interesting in a different way and takes only 3 hours on an electric train, which leaves from Estación del Pacífico at 7 in the morning and about every 3 hours thereafter. Take along beach things and sun lotlon. You can return the same day by train at 6 p.m. if you wish. There is an excellent motel "Tioga" and two or three other fairly good hotels. The Restaurant "Aloha" next to the "Tioga" serves delicious meals at a sidewalk cafe right across the street from the ocean.

Planes: Small planes fly on regular schedules to many parts of the country, leaving from the airport at Pavas (about 3 kilometers West of San José). Bus service is available from the station on 16th Street near the Children's Hospital (Hospital de Niños). Buses are marked "Pavas-Aeroquerto".

Boats: Boats can be chartered with or without guides. Ask at beach hotels and fishing resorts.

OUT OF TOWN TRIPS

QUEPOS:

The Pacific port can be reached by plane, and if arrangements for transportation can be made, it is worthwhile since arrival takes only 45 minutes. By car the trip takes 4 to 5 hours. However, the view is magnificent, even though the car must travel over an unpayed road that winds around many mountains. The view is totally different from other areas of Costa Rica, being more arid and steeper, the road finally descends onto the plains and goes through the United Fruit Company's Palm Oil plantations, The city of Quepos is small, the main attraction being the view of the magnificent sunsets over the wide horseshoe bay. If you have your car you can visit beautiful, and nearly virgin, Manuel Antonio Beach, as well as other well known as Esterillos, Dominical and Jach, At all of these you find cabins for rent, which although definitely not luxury class, are pleasant. The trip could give you an afternoon and next morning of sun and sea, though we recommend extreme caution when swimming since there are no life guards or life saving equipment and the sea is treacherous.

GOLFITO:

If you have wondered about the Banana Plantations, a visit to this exotic and interesting Banana Port is in order. Flight from San José to Golfito takes an hour and fifteen minutes. There are tourist accomodations obtainable from Osa Forestal. However, it is recommended that the plantation manager be contacted before the trip to as certain whether it would be convenient to visit the plantation. Golfito es very hot and humid. The bay es interesting and there are stories that gold can be found in the location. On visits to some of the beaches many "tourists" pan for gold, some having stayed in the area for many years as they discover a pebble here and there making them dream of riches just within their fingertips.

SAN ISIDRO DE EL GENERAL:

This town is on the Pan American Highway and be reached easily by car in around 3 hours. Most of the highway is smooth and pleasant, passing through dense rain forests of great beauty. However, fog plagues the higher regions, providing a ghost-like atmosphere that lends drama to the trip. At San Isidro you can stay at the Hotel Chirripo, From there it is recommended that the surrounding countryside he investigated. In many places large plots of land have been purchased by Americans who are living in pioneer fashion while they develop their particular interests. Cattle ranches, pig farms, coffee plantations and one especially, whose owner has turned it over as a heaven for migrating birds as well as the local species. If you are lucky and are far enough into the forest, you may even see a Quetzal.

MONTEVERDE:

A nice leisurely journey over a weekend is to plan to visit the Quaker Cheese Colony of Monteverde. The history of this 15 year old settlement whose members came to Costa Rica in search of a land that would let them follow their own philosophy without Government intervention makes interesting reading, and can be found in the publication called COSTA RICA, the last chapter.

You can reach Monteverde by using the new highway to Puntarenas or travelling more slowly by the old road, which takes you through the colorful towns including Sarchí where you can stop and watch the craftsmen painting the carts.

Boarding can be requested at Monteverde, where there is a rooming house. The road up the mountain is very steep and unpaved, preferably should be made in a four-wheel-drive vehicle, but is worth the inconvenience, since at each bend of the road, little red roofed villages come into view, and in the early morning sun area often circled by a bright rainbow.

Should Monteverde not offer acommodations, by late afternoon it is possible to descend again and spend the night at one of the many hotels in Puntarenas.

RESTAURANTS IN AND NEAR SAN JOSE

As San José grows, new restaurants open offering more variety in places to go and things to eat. The following is a brief rundown of just a few of the tried and true:

Chalet Suizo. Avenida 1, between calles 5 and 7; speciality cheese fondue and fondue bourguinonne, plus almost anything else, a good family restaurant.

Van Gogh. Calle 3, one and a half blocks north of Sears; smorgasborg dally for lunch, also flambés, steaks, and Rijsttafel (Indonesian) rice dish.

L'Escargot. Avenida 5, half block east of LACSA office, French cuisine.

La Bastille, Paseo Colón, corner of Calle 22, French cuisine.

Asana Tokyo, Calle 3 B, just off Avenida 7; sukyaki and sake.

Los Anonos. Escazú, 5 blocks from bridge Los Anonos; grilled steaks, shish ka bob.

La Fortuna. Avenida 6 between Calles 2 and 4. Chinese Food.

If you are in a hurry .-

Mac Donalds, Downtown, across from Banco Central; also in La Sabana diagonally across from the National Gymnasium, hamburgers, french fries, chicken.

Billy Boy. Avenida Central; hamburgers, sodas, milkshakes.

Mr. Pizza. Avenida 1, between Calles 7 and 9, large variety of pizza, also hamburgers.

Pizza Hut. Calle 4, one block south of Avenida Central; pizza, naturally,

Perhaps you crave good toe cream -

Pops. Downtown, across from Banco Central; La Sabana, and also San Pedro on road to Cartago. Great variety of flavors and concoctions—sundaes, banana splits with all kinds of toppings.

SIGHTSEEING

There are many excellent tour companies and travel agencies who can arrange visits of in and around the city, to the volcanoes, etc., but for those who like to do their "own thing" here is a list of places to see.

Suggested places to visit in and near San José: Central Section: in town.

Gold Collection in Banco Central (Open Wednesday and Saturday Mornings)

Museum — Old Fort converted into Museum, between Ave. Central and 2nd Avenue on 19th St. Open 9:00 a.m. to 11:00 a.m. and from 2:00 p.m. to 5:00 p.m. Closed Mondays.

Teatro Nacional — Interesting mammoth screw mechanism which lifts entire floor to stage level. Operated by hand from basement.

University City — Approximately 11 buildings. Enrollment around 20,000 students.

Markets — Central Market between Ave. 1 and Central, Calle 6. Borbon Market between Ave. 3 & 5, Calle 8.

Northeast Section:

1 Av. to 23 Calle turn right past Cine California to Av. Central. De Guadalupe.

El Caballo Blanco – Moravia. Leather goods, hassocks, bags, chair seats, etc.

Exotic Birds — Litwin, San Isidro Coronado. Interesting collection.

Cathedral of San Isidro Lovely Gothic architecture outside.

Rancho Redondo Wonderful panoramic view from lookout near Canal 7 T V. tower.

Northern Section:

Take road to airport and turn off at sign for Heredia.

San Rafael de Heredia. Lovely church in a small town. Go through Heredia. Ask directions.

El Club Castrillo. Rather interesting new country club in an old-fashioned castle type building. Go through Heredia and above-mentioned San Rafael for 2 o 3 kms.

(This area has lots of pine trees and the views are breath-taking).

Olo de Agua, Recreational area, Very popular on weekends. Interesting spring in a lovely setting. Turn left off auto-pista through town of San Antonio de Belen, Near Antonio Lehmann's finca.

Mariano's Restaurant, For weekend lunches and inners. Go through Heredia through Barba, Take fork to the right several hundred yards.

Roble Alto Child Care Center. Beautiful spot, well-run child care organization, mostly supported by Mission donations from the U.S. Through Barba take left fork after passing Mariano's.

Apache Village, Anachronism, Costa Rica's idea of what the wild west was like, Recreational center, fort, American Indians, lovely scenery. On left side of road north of San Rafael de Heredia.

Poas Volcano. Take Highway 9 out of Heredia or 130 out of Alajuela (they join). Then take 120 to the Volcano. The road is only fair.

Northwest Section:

Alajuela, Interesting church of La Agonfa in eastern part of town. Has murals on walls which include actual citizens of Alajuela.

Grecia. Good sized small town. Heart of pineapple section. Wonderful pineapples in January.

Sarchí, Home of the Costa Rican cart. Two or three shops which make them as well as other furniture to order.

Southeast Section:

La Laguna Coffee Plantation (Curridabat). Take road towards Cartago. One kilometer east of Restaurant Galera, turn left at Blue and White house and follow private road one kilometer more to main house. See complete story of coffee from tree to finished product.

Cartago. Los Angeles Church. Basilica Byzantine style. Houses statue to which is attributed great healing powers.

La Parroquia Ruins Roofless unfinished church now surrounds a lovely garden.

Orosi Valley, Small village, Church built in 1741, Museum alongside.

Motel de Río. Good place to have lunch after seeing church at Orosi. Restaurant alongside of river. Fresh fish.

Dam at Cachi. Provides electric power for Central Valley. Beautiful view

Volcano Irazú. Go through Cartago past Basílica. Watch for sign on left.

Ruins of Ujarras. Go through Cartago and Paraiso. Watch for signs or ask townspeople.

Southern Section:

Desamparados. Take 9th St. south past Plaza Víquez turn left and follow road to Desamparados. Beautiful church there. Then proceed to

Aserri. Lovely white church. Continue through village to an excellent highway to

Mirador Ram Luna, Restaurant with beautiful panoramic view, Good steaks, Orchestra on weekends, Nice place to stop for tea after continuing on highway of magnificent views to

San Ignacio de Acosta. This little village is at the end of an excellent road. It has an interesting church which has life-size figures of the nativity at Christmas time which takes up about one-fifth of the church. At the market it is possible to secure sometimes, wooden bateas which the women used to wash clothes. They are nice for large fruit arrangements etc. There is no way out of San Ignacio but the way you came.

Southwest Section:

Take main road to Escazú. Turn right past Embassy Residence and proceed to

Santa Ana Valley, Includes Lagos de Lindora Popular weekend recreational center. Ceramic factory, San Agustín. Rather primitive but inexpensive.

Villa Colón. Road to Puriscal, Quepos, etc Lovely scenery if you just want to drive.

Escazu. Pottery and Sculpture. The Eigens are American Artists who live in Escazú. Barbara, a potter, makes wheel-thrown functional stoneware. Eric makes use of the beautiful local woods and marble in his sculpture. They are located 700 meters west of the Cine Escazú in Escazú's Central Plaza. Call 28-09-15 for an appointment before driving out.

COMMUNICATIONS

Mail:

The Central Post Office is located on Avenida 1 and Calle 2, it offers all the usual mailing services and has boxes (apartados) for rent.

Telephones:

Local telephone service is under the jurisdiction of ICE (Instituto Costarricense de Electricidad). Long distance calls may be placed through Radiográfica either from one's home from the central office at Avenida 5 and Calle 3. The minimum rate for 3 minutes to the United States is \$ 7.50 U.S. Consult the front of the telephone directory for information. Dial 116 for the U.S. Operators speak English.

NEWSPAPERS

Costa Rica has 6 daily newspapers in Spanish: La Nación, La República and Diario de Costa Rica are morning papers; La Prensa Libre, La Hora and La Tarde are published in the afternoon. These papers are sold by vendors on street corners throughout the country. In San José, you'll find most of the newspaper vendors on Avenida Central. The Miami Herald (in English) arrives daily by air and may be purchased at the Sans Souci Candy Shop in the Gran Hotel Costa Rica. The New York Times is available, too, but only by suscription.

San José has three weekly English newspapers, the Tico Times, published every Friday, the San José News, published every Thursday, and the Costa Rica Info-Report, published every Wednesday (in both English and Spanish) replete with information concerning people, laws, places, and opportunities in Costa Rica. There is also the Grapevine which is not exactly a newspaper but includes good information about Costa Rica for the tourist. Look for them all in hotel tobbies and at the Book Shop, in the arcade at the Gran Hotel Costa Rica.

The Sans Souci Candy Shop in the Hotel Costa Rica is open on Sundays and has a good selection of English newspapers, magazines, and some paper backs.

If you would like to peruse a magazine, visit the Casa de las Revistas, Calle 5, between Avenida Central and Avenida 2. You should also try the Book Shop, which in addition to magazines, has an excellent selection of paper backs for readers of all ages.

AUTOMOBILES AND MOTOR-BIKES

Tourists entering the country are entitled to keep their vehicles without customs duty for 30 days. Permits can be extended for a total of 6 months at the Instituto Costarricense de Turismo, provided the request is made before the expiration of the 30 day period. Driving without a permit invalidates any injurance carried on the vehicle.

It is suggested that the adventuresome who enjoy travel on by-ways as well as highways bring a four-wheel drive vehicle. For ordinary every day use, the smaller the car, the better, as downtown streets are narrow and parking is at a premium.

Drivers licenses for automobiles are issued for persons over 21, or under 21 if they are married. No unmarried person ages 18 through 20 may have a permit without a special guaranty (S/G) Bond being posted by the father. Unmarried persons 13 to 15 years may obtain a permit to drive a motor-bike up to 90 c.c., but need a S/G Bond for motor bikes over 90

Unmarried persons ages 16 and 17 may operate a motor bike up to 125 c.c. with a permit, but need a S/G bond to operate motor bikes over 125 c.c. Unmarried persons under age 13 may not drive any type of motor vehicle.

Special permits must be obtained to operate a motor-bike or scooter, a car license is not valid. You must also obtain insurance from INS (Instituto Nacional de Seguros). Procedure for obtaining the

permit is the same as for automobiles except that all applicants must take a driver's test and pay ¢ 48.00 to the Transit Bureau.

Costa Rican Law requieres that all persons operating or riding a motorcycle, motor-bike or scooter wear a safety helmet.

U.S. Government employees and/or dependents can obtain detailed information from the JAO/Admin. Office.

Procedure for obtaining and renewing driving permits.

Take your passport and C 11.00 to Hospital San Juan de Dios (side street door) for physical examination. (Men before 3.00 p.m., women after 3.00 p.m.). Immediately, or next day for women, take the physical examination certificate, passport, 4 photos, C 43.00 and a valid foreign drivers license to the Transit Bureau. If you do not have a drivers permit you have to take a driver's test and pay C 78.00

The Transit Bureau will inform you when the permit is ready, which must be picked up personally. Take identification. (Passport or carnet).

The above permit, which is valid for one year only, may be renewed for one, two or three years upon expiration. In that case, take your old license and C 11.00 to the Hospital San Juan de Dios for a physical examination. Take physical examination certificate, your old driver's license, one photo and money to the Transit Bureau. One year renewal is C43.00, two year renewal is C54.00 and three year renewal C 81.00.

Renewed permit must be picked up personally.

AUTOMOBILE INSURANCE:

Under Costa Rican law only the Instituto Nacional de Seguros (INS) can engage in insurance business. It may be obtained at border points of entry or in any major city. This policy is good for a month and offers the following protection:

Civil responsibility, injury or death of third party (NOT including passengers in insured car).

Maximum per person	C 10,000
Maximum limit per accident	C 20,000
Maximum property damage to third party	C 10.000

Cost for one month is C 68.50 which includes legal defence in court of the insured or any driver with a driver's permit of a properly licensed car. The law is strictly enforced and there are severe penalties for violation. In addition, in case of an accident resulting in death or serious injury only the INS policy may be used as bond to release the insured from jail. Foreign policies are not permitted in court

and only the INS can provide local service for defense or adjustment of claims.

Insurance costs from any INS agent for one year are constant, but optional coverage clauses vary according to the value of the insured vehicle.

Bodily Injury	© 13,000 one person	
	@ 150,000 two or more (312.00
Property damage	Ø 35,000	, 230,00
Any licensed oper-	ator,	25.00
	á	. 567 OC

Optional coverage includes collision and upset (© 500.00 deductible recommended), fire and theft and glass breakage, in a theft claim, the whole car must be stolen and reported to police before any claim can be made for the loss of car or parts.

ACCIDENT PROCEDURE OUTLINE

At the scene of the accident:

Telephone 117 for a traffic official, Get the names and addresses of witnesses. Do not move either vehicle until the traffic official authorizes removal.

Make no effort to remove injured from scene.

Make no statements on cause of accident except to the official or representative of INS.

Notify INS as soon as possible.

U.S. Government employees and/or dependents should notify the JAO/Admin. Office at once.

TO FILE YOUR CLAIM:

Report to the Sección de Infracciones, Transit Office (200 varas West of the North-East corner of Piaza Viguez).

Report to the Segunda Agencia Judicial de Tránsito (150 varas South of South-East corner of Plaza Víguez),

Report to the Instituto Nacional de Seguros, and complete the form "Aviso de Accidente" [Calle 10 and Ave. Central/2].

Get Sr. Campos for damage appraisal (100 varas north of Coca Cola Buildings). Hours 8:00 a.m. – 11:00 a.m. and 1:30 p.m. — 3:00 p.m. weekdays, regular morning hours only on Saturday.

If appraisal is approved by INS take the car to any garage for repairs, INS will pay cash settlement to insured.

REPAIRS:

Body shops are numerous, reasonable and good, but it is best to ask advice from someone who can recommend one. Ask someone who has the same kind of car as yours.

Motor repairs and tune ups are another story. A new shop, *Electrocar*, whose owner, Eduardo A. Picado S. has graduated as a technician from North Idaho College, is located 100 yards south and 75 yards west of the Clinica Biblica (on Avenida 16 between Calle Central and Calle 1). Look for the sign EMPI of Costa Rica (Telephone 22-43-21). This shop specializes in electrical and fuel systems. The owner has brought with him tools and machines for detecting motor trouble.

There is a good brake repair and manufacturing shop where English is spoken. It is Fábrica de Frenos Flecha Roja and is located on Calle 14 between Avenidas 7 and 9.

A large Chevrolet Service Center and Garage, Lachner and Saenz is located on Avenida 13 between Calles 18 and 20, Parts can be obtained.

PART II - THE RESIDENT

Living in Costa Rica

Now that you are settled in a hotel, the big question of WHERE to live arises. There are many lovely residential areas either close to town or in the suburbs. Popular-in town barrios (neighborhoods) are: Los Yoses, Escalante, Paseo Colón, San Pedro, La Granja and the area around La Sabana (variously referred to as Sabana Norte, Rohrmoser and Sabana Sur) On the east side of the San José within a 15 minute drive is the suburb of Moravia and the area known as Montes de Oca. On the west side for the quiet of "country" living are Los Anonos, Bello Horizonte and Escazú which are about 15-20 minutes from the center of town. It is said that suburbs on the east side of San José are more damp and humid than on the west side. Most of the suburban areas offer a lot of nice, modern houses with large yards Supermarkets and shopping centers are easily accessible by car from all areas in and near San José There are also a number of modern apartment buildings, both downtown and in the nearby suburbs.

House-hunting:

There are several reliable Real Estate agencies with employees who speak English, but make sure you are explicit with regard to what you want. Some of these agencies are: American Realty, Trans Commercial, Alguivenco and Alquileres Garantizados (See telephone book for numbers).

The most usual size for Costa Rica houses and apartments is 2 or 3 bedrooms. Homes larger than this are more difficult to find and usually rather

expensive. All residential homes have servants' quarters usually with a separate bathroom and shower. In the residential sections there are a few Spanish colonial houses and many modern ories, most being one-story ranch style and of wood, brick or concrete construction. The roofs are usually tile or composition (Ricalit) or galvanized iron; floors are either tile or hardwood. Interior walls are usually plaster finished. Most houses and apartments do not have screening but it can be installed. Although insects and bugs rarely present a severe problem, screening is necessary during certain periods or else you will be bothered by files, mosquitos and coffee flies tand they bitel). Insect sprays are available on the local market, and there are also several household fumigation services.

Practically all homes are adequately equipped with running water (hot and cold) in the bathrooms; however, a substantial number do not have hot water in the kitchen and/or laundry room. Very few homes have bath tubs; showers are the rule, although almost all have a built up (8-12 inches) threshold which permits the bathing of small children, Extra watertanks for storage are to be found in most homes as they are essential during the dry season. All areas have low water pressure and therefore a water pump is necessary (and usually present) in the home.

Since there is a long waiting list for telephones, it is important to rent a house with a telephone already installed (do not expect to have a telephone listed in your name; the directory only lists the name of the owner of the telephone line, usually the landlord). Dependable and inexpensive electricity is available in all areas near San José. The electricity service is 110v, 60 cycles AC, and 3 phase 220v. wiring is usually available in the kitchen, but not in the laundry room. For those who prefer gas ranges, cooking gas is available in tanks and the delivery service is improving.

When furnished houses or apartments are available, the furniture is likely to be very basic and the tenant would want to add lamps, draperies and small kitchen appliances

Even in the case of furnished apartments, refrigerators and stoves provided may leave a lot to be desired. Many unfurnished homes are completely bare, lacking even light fixtures.

HOUSEHOLD EFFECTS AND FURNITURE:

What to bring or not: In the case of an unfurnished house, it is suggested you bring your own furniture. There are several firms who produce tasteful and not too expensive furniture on order, but this could mean that it might take one month to a year Cabinet makers (ebanistas) are available, and their workmanship, materials and cost compare favorably with similar items in the U.S. Care must be

taken that only dry seasoned material is used, as unseasoned woods will crack, warp and split if exposed to temperature and moisture variations. All types of furniture can be used in Costa Rica and no special precautions are necessary.

Since the electric current is the same as the U.S. transformers are not required. Bring with you all electrical equipment such as stoves, tefrigerators, washing machines (they sould be the pressure sensitive type which starts only when the proper amount of water is present), vacuum cleaners, irons, toasters, floor polishers, radios, T.V. (black and white preferable), etc.... You can buy these items in San José at a much higher prices for example, a \$ 200 washing machines sells for nearly \$ 500 here. Because of the long rainy season an electric dryer is recommended, especially for families with children.

Mildew is a constant problem; dehumidifiers are somewhat useful but not essential when proper precautions are taken e.g. periodic airing, light bulbs in closets, etc. Air conditioners are not needed. Except for fireplaces in a few houses there are no heating facilities whatsoever, and electric heaters are welcomed for chilly days and to help combat mold and mildew.

EDUCATION

Educational facilities are considered adequate at all levels. The school year is from March through November in the Costa Rican school system but a modified vacation schedule is offered in most of the schools following the American system.

The three principal schools attended by American children in the San José area are: Costa Rica Academy, Country Day School and Lincoln School.

Costa Rica Academy:

Begun in September 1970, is a non-profit, parent owned and operated school located in Sabana Norte. The school offers an American curriculum, uses American text books, and most of the faculty and students are American. The school year runs from mid-August to late June with a six-week vacation from mid-December to the first of February. Each family must purchase one share of common stock in the school in addition to the regular matriculation, tuition and book fees. The enrollment, from nursery through 12th grade, is about 150 students and fees vary from about \$ 24.00 to \$ 40.00 a month depending on the grade. There is bus service available. Telephone: 21-93-97.

Country Day School:

is a private school of approximately 225 students, almost all American, in kindergarten through 12th grade. The high school is located in downtown San José, half a block from the entrance to the Parque Bolívar. The elementary school is located on the road to Zapote. Curriculum and text books are American and the school year follows the

same pattern as the Costa Rica Academy Tultion fees include all books and supplies and vary from about \$ 25.00 to \$ 55.00 monthly. Bus service is in addition to tuition and matriculation fees. Telephones: High School — 21-65 95. Elementary School — 25-11-48.

Lincoln School:

Which is accredited by the Southern Association of Schools and Colleges of the United States and the Costa Rican Government, is located in Moravia. Bus service is provided from all parts of the city. The enrollment, from nursery school to Junior college, is approximately 1.000 students and is 75% Costa Rican and 25% American. The teachers are mostly Costa Rican but instruction is almost entirely in English using American text books. The Junior College offers secretarial rather than academic courses. The school year begins in March and ends in late November. The purchase of stock in the school is optional and the costs are payable in colones or dollars. Fees vary from about C 125 - 275 a month. Books, supplies and bus fees are extra. Telephone: 25-81-33.

There are several bilingual schools in the San José area that operate on the school year of March to November, Some of the principal ones are as follows:

St. Francis in Moravia:

A boys school run by an American Order of Catholic priests. Grades 1-12. Telephone: 25-34-26. St. Clares in Moravia:

A girls school run by American nuns. High school only. Telephone: 25-15-74
Methodista School in San Pedro:

It receives limited support from the U.S Methodist church. Grades K-12. Telephone: 25-06-55.

Anglo American in Barrio Escalante:

Grades K-6. This is not a British school despite the name. Telephone 22-07-58.

Pan American in Los Yoses:

Grades Nursery - 6. Telephone 25-36-17.

There are many nursery schools scattered throughout the city. Some which have been used by Americans are:

Lincoln in Moravia
Costa Rica Academy in Sabana Norte
Mimi Chittendens' Montessori School in Los Yoses
Arco Iris in Escazú
Kinder Marisa in Barrio Amón

DOMESTIC HELP

Most Americans in San José hire on live-in-maid who does the general housework, the faundry and who helps with the cooking. Larger families may also hire a cook and/or a nursemaid who would care for the children, take them for walks, bathe and dress them. Costa Rican maids, as a rule, are better

educated than those found elsewhere in Latin America and if treated accordingly will take pride in their work.

Families who do not speak Spanish may find a maid of Jamaican descent who can speak English, Live-in maids are becoming increasingly difficult to find and some families have settled for day help only. This situation is not convenient and does present the problem of baby sitting and leaving your house unattended. Having a maid in the house is a deterrent to petty thieves when you want to go out for an evening or on a vacation trip. Most homes do include a maid's room but the employer must provide bed and bedding as well as other furniture since most maids' rooms do not have closets. Uniforms are optional and a matter of personal preference. Average salaries for a live in maid may vary from around C 200-300 a month with that for a cook being slightly higher. Wages for day help begin at & 1.50 per

The Government of Costa Rica has recently instituted the requirement that domestic employees join the Social Security program (primarily for health benefits). Many domestic employees will object to paying their 4% (employers must pay 5% and the government 2%) of their salaries. However, legally they are obliged to do so. Check with the United States Consulate to find out the details of this responsibility on the part of the employer.

Many families also employ a gardner on a weekly or bi-weekly basis. He may help with heavy jobs around the house such as window washing. Most of these men do not own garden tools and expect each house to provide its own. A gardener-handyman is usually paid around C 2 00 per hour and is provided with one hot meal and coffee twice daily. Most American women drive their own cars but a few families do employ a full time driver, Another consideration may be a night guard. There are men in several areas of the city who will patrol past your house several times a night for a small monthly fee. It is usually worth the price to avoid possible break ins. Some women have found sewing girls who will come to the house to sew on a daily basis. This is a more economical system than using a regular seamstress but you must provide your own sewing machine.

The Costa Rican Labor Code appears in the Costa Rican Women's Club Telephone Directory or a copy may be obtained from the General Services Office of the United States Embassy.

PETS

The importation of all pets is strictly controlled by the Costa Rican Ministry of Public Health and permits for their entry must be obtained in advance of the arrival. To obtain a permit application write to:

Departamento de Zoonosis,

Ministerio de Satubridad Publica, San José, Costa Rica. Ministerio de Salud Publica Or. Roman Miguel Apartado 2031 San José, Costa Rica Upon receipt of the application by the Ministry of Health, they will in turn issue the permit —malling one copy to pet owner and one copy to port of entry. Failure to obtain that permit may result in the pet being refused entry or its detention by health authorities. For U.S. Government personnel only, the Embassy will make application, etc., but the pet owner should inform the Embassy well in advance of his intent to import a pet.*

The documents listed below should be certified by a Costa Rican Consul prior to the departure of the pet:

- 1. Certificate of good health.
- 2. Certificate of recent anti-rables vaccination.
- Certificate stating pet is free of Taenia Equinococus.

They must accompany the pet as they must be presented at the airport upon leaving the U.S. and on entering Costa Rica.

Without the above documents, the Costa Rican Government will requiere a quarantine period.

The pet should have a proper cage or crate with screen cover.

When preparing to leave Costa Rica with your pet the above documents should be obtained from your Veterinarian, presented to the Department de Zoonosis and stamped at the Banco Central in San José.

THE SPANISH LANGUAGE Spanish Lessons:

Pocket-size and larger Spanish-English/English-Spanish dictionaries are available from Librería Lehmann and Librería Universal on Avenida Central

Spanish lessons are available at the Centro Cultural Costarricense-Norteamericano (22-74-18, 22-75-18), and the Instituto de Lengua Español (22-52-27).

CLUBS:

Garden Club (Club de Jardín)
Costa Rica Country Club (21-35-52, 28-09-62)
Costa Rica Tennis Club (22-15-88)
Belo Horizonte Club (28-09-24)
Club La Guaria (25-14-58)
Club Carrari (22-02-64, 47-14-55, 47-21-55)
Club Hípico La Caraña (28-61-06)
Women's Club of Costa Rica (Apdo, 4649, meets second Wednesday each month March-December).
Pensionado's Club (Club for Retired Persons of other countries — 28-10-20)

Most international fraternal organizations have a representative club in San José, and can be found under "Clubs" in the Costa Rica Directorio Telefònico yellow pages

[•] The Empassy needs the following information for the application hind (cat, dog, parrot, etc.), breed, color, sex, age and name of pet. There is an approximate fee of C 15.00 (or dollar equivalent for extificate, stamps, etc. for the importation or exportation of a pet.

LIBRARIES AND BOOK STORES:

The Book Shop, in arcade of Gran Hotel Costa Rica, mainly pocketbooks and children's books in English. Sans Souci, Calle 3, opposite Teatro Nacional — newspapers, magazines and U.S. candy bars.

The Library of the Centro Cultural Costarricense is available to members. New members are always welcome, and the cost of annual membership is minimal. (C 100 a year for the whole family).

Stationery supplies are available at all supermarkets, plus Eibrerla Lehmann and Librerla Universal on Avenida Central.

SHOPPING GUIDE REFERENCE (and where to find it):

The Womens's Club of Costa Rica is at present preparing a comprehensive shopping guide, which will be made available to the public at a minimal cost. (Until then...good tuck!)

Although Spanish culture and rule was introduced into the country in the 1520's, social and economic stagnation persisted for three centuries. Most of the population lived on the Central Plateau which was isolated from the rest of the Spanish domain. For many years only a mule road connected Cartago, the old capital, with Panamá to the South. In addition, there was the burden of Spanish mercantile polícies and those on the coasts were subjected to raids by Indians from Nicaragua and attacks by English and Dutch pirates.

The people were small farmers for the most part and there was no slave labor. The resulting egaliterian society made up of many small landholders is credited by many with having produced Costa Rica's democratic base.

Following the declaration of independence of the Central American state in 1821, Costa Rica suddenly found itself free. The independence was shortlived as the Emperor of México annexed the Central American states in 1822. Two years later, however, came the proclamation of the Charter of the Central American Federation, and on January 22, 1825, the promulgation of Costa Rica's first constitution. The nation withdrew from the Federation in 1838 and proclaimed itself a republic ten years fater.

Among the nation's early heroes were President Juan Rafael Mora, who was instrumental in defeating William Walker, a little man from Tennessee who attempted to make himself dictator of a portion of Central American, and Juan Santamaría, who sacrificed his life in battle against Walker's army in 1856.

Early rulers of Costa Rica were of two types, educators or strong men. The former founded schools, and established the first University, Santo Tomás, the latter, though dictators, abolished capital punishment, initiated the railroad from Limón to the Central Plateau and contributed to progress in sanitation, transportation, communications and agriculture. The Costa Rican dictators neither robbed the treasury, raised large armies, or evidenced greed.

During the 1889 elections freedom of speech was guaranteed and there was freedom of the press. The people of Costa Rica were aroused during the presidential campaign and to this day are actively concerned about their government. José Joaquín Rodríguez was elected, but the supporters of the existing government wished to remain in power, until they realized that the sturdy farmers threatened to rise up to enforce justice. This was the first of several occasions when the Costa Rican people have banded together to assure democratic succession to the presidency.

True constitutional government has been the rule in Costa Rica since 1902 with the exceptions of 1917 (when Minister of War Tinoco seized the rule in protest against unpopular tax reforms, and public pressure prevailed and he fled the country), and 1948's War of National Liberation. This civil war came about because the incumbent party (of Rafael A. Calderón Guardia) refused to accept the election results which made Otilio Ulate president. People became arounsed and a small band headed by José Figueres set about to oust the illegal government. The movement was successful and José Figueres became President of the Founding Junta of the Second Republic. He continued in office for over a year and then stepped down, voluntarily turning the government over to Otilio Ulate (legally elected before). Since then Costa Rica has continued to mature politically.

GOVERNMENT

Costa Rica is a democratic republic with a centralized government headed by a President elected for a four year term. He may not succeed himself, Elected with the President are First and Second Vice Presidents who are in the line of succession to the presidency.

The Cabinet of 12 ministers serves at the will of the Chief Executive. The President and his cabinet constitute the Council of Government which has limited excecutive powers in the fields of national defense, clemency and appointments.

Legislative power rests with the unicameral Legislative Assembly, a body of 57 members whose terms are concurrent with that of the President. Deputies (congressmen) are elected through a system of proportional representation and may not be reelected to consecutive terms.

Judicial power of the state is exercised by the Supreme Court of Justice and other minor courts as established by law. Like its United States counter-part, the Supreme Court is the highest court of the land. Its 17 justices serve 8 year terms automatically renewed unless reelection is opposed by two-thirds the total membership of the Legislative Assembly.

There is universal suffrage for all Costa Ricans over 18 years of age and the freedom with which elections are conducted is attested to by the fact that no party has succeeded itself in the Presidency since the promulgation of the Constitution in 1949.

Costa Rica's Constitution prohibits the

existence of an army. The armed forces of the country consist principally of a Civil and Rural Guard, totalling some 5,000 men. They are used, respectively for maintaining law and order and preventing smuggling, bootleggin, etc. Costa Rica prides itself on having more school teachers than civil guards.

Also of major importance in the Government are the autonomous and semi-autonomous institutions, such as the nationalized banks, the National Insurance Institute, the Institute of Housing and Urban Affairs, the Institute of Lands and Colonies and the Costa Rican Institute of Electricity (ICE).

Costa Rica's democratic tradition and constant dedication to hemispheric democracy have given it a reputation and importance unusual for so small a state, it has made active participation in international agencies such as the UN and OAS an essential part of its foreign policy. In addition, it is committed to strengthening Central American solidarity and to broaden the nation's trade and diplomatic relations. ECONOMY

In recent years Costa Rican economic growth has been among the highest in the hemisphere Fundamentally an agricultural country, it has as its principal exports: coffee, bananas, cacao, sugar, beel and wood. The cattle industry is growing steadily. There is also manufacturing of such items as textiles, cigarretes, rope, beverages, matches, leather goods, soaps, rubber products, toilet articles and cosmetics, edible oil, shoes, construction materials, plastics, etc. The Government is interested in the establishment of new industries and the investment of both domestic and foreign capital.

The Cost of living in Costa Rica is only a small fraction of what it is elsewhere, providing the livelihood is maintained within the economy of the country by purchasing fresh meats, fish, fruits and vegetables in the local markets. Imported items are subject to tax and are substantially higher in price, than anything produced or manufactured locally.

CUSTOMS, TRADITIONS AND LEGENDS

No introduction to Costa Rica would be complete without reference to some of its customs. While these are mostly in evidence in the small towns, they are an important part of the national culture. They consist of:

tonadas, songs to guitar accompaniment, usually sad; portales, elaborate displays of the Nativity at Christmas time, sometimes involving processions;

Turnos, similar to countyfares, but in celebration of almost any event, with games, special foods, cart parades, music, races, special beverages. These are held all over the country on special dates;

corridas de toros, bull fights with no killing, mostly spectacle with music and excitement;

carreras de caballo, horse races;

Folkloric dances, namely, el Punto Guanacasteco, La Botijuela, el Zapateado, and el Torito, danced while marimbas are playing, with the dancers in colorful, embroidered costumes;

ARE YOU THINKING OF RETIRING IN COSTA RICA?

The lovely climate, the friendly "Ticos", and the beautiful scenery may prompt the question, "Why not retire here?". A very generous law, No. 4812, makes it possible for those with an income of at least \$ 300 a month from abroad to obtain resident status as retirees or annuitants. They have all the privileges of Costa Rican except voting or accepting most types of remunerative work, although one may work for himself or set up his own business. A 'pensionado" may, for a limited time after he acquires that status, bring in household goods and personal effects free of a maximum of \$7,000 in duties (this sum means import duties rather than the total value of the goods). He may also bring a car duty-free every five years and sell it at the end of that period.

PRACTICAL DETAILS:

Your local Costa Rican Consul can help you obtain papers attesting to your income and your "clean" police record. Agencies and lawyers in Costa Rica can help you untangle the inevitable bureaucratic red tape, or you can tackle the job yourself. The I.C.T. (Instituto Costarricense de Turismo) Box 777, San José, will furnish further information. To ease the transition to a new home in a new country, you might wish to join the Pensionados Club, which usually meets the first Saturday afternoon of each month in different locations and tries to be helpful, especially to new and prospective pensionados. The President for 1973 is Dr. John Biesanz, Tet 28-10 20, and Box 8-3880, San José.

BRING IN:

Whatever you cannot live without, whether it is old letters and photos, a new dishwasher, or 49 cartons of books (as we did!), but, of more importance, bring with you the realization that this is an unusually hospitable and generous country, whose customs and values demand respect. If you are not resilient and adaptable, you may experience "culture shock" and alienate your amiable hosts (and spoil the situation for others); in that case, you had better retire to more familiar surroundings. Also bring in a genuine willingness to study Spanish and communicate in it even when you know only "four words", as they say; your respect for their language will be amply repaid in friendliness toward you!

LEAVE BEHIND:

- Any traces of an attitude that all the ways and things of your homeland are necessarily superior.
- 2) Impatience. Relax! Keep telling yourself that is why you came here. Costa Ricans have great self-respect and dignity, and an unusual fondness for and tolerance of North Americans. Let's try to keep it that way!

EMERGENCY TELEPHONE NUMBERS

117 Police (Radio Patrol) 118 Fire Department

HOSPITALS

22-00 88	San Juan de Dios
21.54.22	Clínica Bíblica
2281-22	Hospital México
22-01-22	Hospital de Niños
21-64-33	•
21-93 99	Ctínica Santa Rita

21-93 99 Ctínica Santa Rita 25-50-55 Clínica Católica

126 ELECTRIC COMPANY - 1.C.E. 23 55-55 WATER COMPANY - S.N.A.A.

HISTORY

In 1502, on his fourth and last voyage to the New World Christopher Columbus landed on the isle now known as "Uvita" off the Port of Limón, Costa Rica. Deceived by the gold necklaces of the native Carib Indians, he thought the area was rich with gold and named it Costa Rica, Rich Coast.

Carnaval de Puntarenas, a carnival held annually around April 1.

carnaval de Limón, a carnival held annually on October 12, predominantly by and for the morenos of Limón;

peregrinos, pilgrimages on August 2 to the miraculous shrine at the Basilica of Cartago, Many people walk from San José.

Legend of the Virgin of Los Angeles, Patroness of Costa Rica. On the morning of August 2, 1635, a humble colored girl went to fetch wood for the morning's cooking in a craggy brambled area in la Puebla de los Pardos, near Cartago. She was startled to see on a rock, a carved image of the Blessed Virgin with the Child in her arms. The girl took the statue to her house and reverently placed it in a box. At noon, while she collected wood again, she noticed a statue in the same place. Thinking it a duplicate, she took it home, but discovered that the original statue was no longer in the box. She again placed the statue in the box, and it disappeared again to reappear on a rock in

the brambles. The third time this happened, she reported the incident to the local priest. The following day's reappearance of the statue inspired the priest and several townspeople to carry the statue in procession to the church, it disappeared once more, this time from the church, in favor of the bramble patch. Finally, it was understood that the Virgin wished a church to be built on the site of the statue's original appearance. Work was begun on a temporary shrine inmediately and a permanent was completed in 1715. This was destroyed in 1723, rebuilt in 1727. It continued in existence until its destruction by earthquake in 1910. Now the statue is housed in a magnificent basilica in Cartago where it is visited and venerated by thousands each year, Many miracles are atributed to its presence and the walls of the Basilica are covered with mementos in gratitude for favors granted.

Legend of the Virgin del "Rescate" and the Ruins of Ujarrás. One legend says that an Indian, fishing in the Reventazon River, saw a large object floating on the swollen waters. He brought it to the river bank, and placed it on his back with the intention of taking it to Cartago, His journey took him as far as Ujarras, at which point it was impossible to move the box, no matter now many persons tried to help him. The incident was told to the Franciscan Fathers in Cartago who came to Ujarras and likewise failed in their efforts to move the box. They decided to open it and discovered a lovely statue of the Blessed Virgin. They finally realized that the Virgin wanted a church constructed there, in Ujarras. The resulting shrine was the site of many miracles. In 1832 the population of Ujarras was depleted because of malaria, floods, etc. A legislative decree ordered the population to a new site, Santa Lucia, (now known as Paraiso). The statue was successfully transferred to the church there where it remains and is venerated to this day. The lovely ruins of the old church at Ujarras are the site of an annual celebration in honor of the Virgin.

The Church and Convent at Orosi, Since 1741 this church has been a monument to the important contributions of the Franciscan Order to the social, cultural and religious life of Costa Rica.

Este folleto ha sido impreso por cortesía del

INSTITUTO COSTARRICENSE DE TURISMO Departamento de Promoción Apartado 777 San José, Costa Rica, C.A.

This booklet has been printed by courtesy of

INSTITUTO COSTARRICENSE DE TURIS MO

Departamento de Promoción P.O. Box 777, San José, Costa Rica, C.A.

CHAPTER IV

Living in San José

San José should take off at least 15 years of a man's age, if not physiologically at least psychologically. Girls, and it is generally agreed that they are the most charming in all of Latin America, consider older men as highly eligible and it's not a rarity to see a 20 year old girl "muy linda," making eyes and smiling at a 40 year old North American. North Americans, say the girls, can be trusted and will assume any responsibilities they might take on.

Then there is the climate with a highly dependable sun throughout the dry season, from September to about April. The rest of the year the "Josefino", native or newcomer, had better make an umbrella a part of his standard going-out attire. The mornings can usually be depended upon to be



Costa Rican beauty in front of the "Yellow House," where the Ministry of Foreign Relations is located. At the left, a glimpse of the "Parque España."

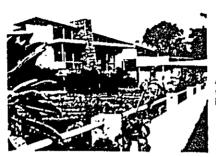
crystal electric blue, but around noon during the rainy season clouds begin rolling down from the mountains giving a half hour to an hour's warning that rain is on the way. Even with an average annual rainfall of 72 inches, and rain nearly every day during the "invierno," the air is dry when there is no rain. Clothes can be washed in the morning and will be dry before the rains come. Temperatures are unusually equable. It seldom varies more than five degrees on both sides of seventy degrees Fahrenheit. The highest temperature recorded was 79°F, lowest was 60°F.

Another exciting thing about San José is the color—pastels everywhere—at first a little disconcerting to a Northerner. Homes are built wall to wall. Only the most expensive homes have front lawns, but the middle class ones afford a small patio in the rear for refuge from the world. Windows are nearly always barred. Roofs present a Costa Rican trademark for the air traveler. Nearly all are red corrugated metal, not the least of which is the president's palace. Part of the reason goes back to a law passed in 1910 which made such roofs mandatory because of earthquakes. Today the better homes use aluminum, sheeting, or tile roofs.

The cost of a home is amazingly cheap, about \$4.50 a square foot, due primarily to 40c an hour brick masons and carpenters. Land is anazingly expensive, running as high as \$45 a



Street scene showing the National Distillery on the right, "La Casa Amarilla," the foreign relations building, in the background



Architecture in the homes of the suburbs of San José shows imagination and originality.

square yard for some of the choicer locations. It is not unusual for the land in San José to cost more than the house which occupies it. If land is high, real estate taxes are low, costing about \$15 a year for a good home.

Because of the property tax laws, municipalities throughout Costa Rica get little revenue. Real taxes are collected by the National government which remits 20% of them to the municipality.

The high cost of land encourages the practice of building to the very edge of the lot line. Often there is not an inch of space between one house and the next, discouraging gardens and lawns. Land is sold by the square vara, the vara being 33 inches.

Rents are comparatively high. English language ads usually indicate the better homes. Rents range from about \$135 to \$250 a month in the more desirable locations. A reasonably well furnished home can be had for about \$150 a month. Many owners are reluctant, or refuse to rent unless contracts for a year are made.

Autos are considered luxuries and indeed they are, after shipping and import duties are paid. A new Chevy sells for about 44,000 colones, or around \$6.300. Duty on cars is figured by weight and price of the car. Consequently, a Cadillac is a rarity. The annual license fee is small—about \$6.00. People buying cars find it cheaper to bring them in from the Pacific Coast at Puntarenas, even though the car must usually pass through the Panama Canal. The reason for this is that shipping costs via the Government railroad on the west coast is about one third of the rates charged by the British-owned railroad from Port Limón.

Actually, the usual sized American car is out of place in Costa Rica. Many of the roads are too narrow for two of them to pass. Most of the travel is done in and around the level Central Valley. Gasoline sells for 45¢ a gallon. The Volkswagen, English Ford, Opel, and similar cars "fit" the country.

Some people buy small foreign made trucks for the reason that trucks, being considered a necessity, have a cheaper import tax. The Japanese jeep Landrover, popular in Costa Rica, cost \$4.350.

Water is safe and there is plenty of it, thanks mainly to the new reservoirs and pipelines installed recently by the National Water and Sewage Service (SNAA), in several areas of the country. This institution is thus solving the water shortage problem which was so critical in recent years.

Between 1962 and 1966, the SNAA (National Water and Sewage Service) invested a total of 42.8 million colones, (6 millions dollars) 31.3 million in the metropolitan area and 11.5 million in rural areas. It is supplying potable water to nearly one million people, which is about two-thirds of the total population. Costa Rica is one of a few latin contries, where the water is pronounced safe by the public health department.

A day in the life of a "Josefino" can be pleasant and mildly exciting. He is likely to be awakened about 6:00 in the morning by the sound of the daily newspaper being shoved under his front door. The morning paper, "La Nacion," is generally considered to be the "New York Times" of the country.

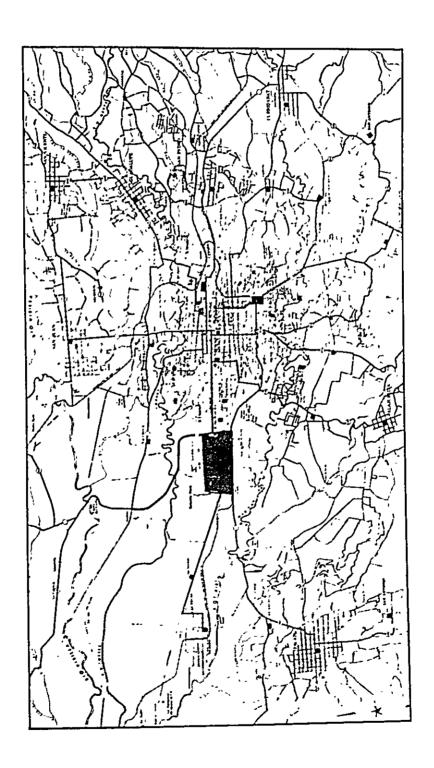
La Republica is another morning daily, and La Prensa Libre is the evening daily; all publish all kinds of news. Subscription rates range from \$0.90 to \$1.15 per month, be sure to start it at the first of the month. Regardless of the day of the month started, the charge is for the complete month.

THE GRAPEVINE is a little English newspaper published every Thursday by Mr. Ed Rosenfeld. It is free and available in hotels, newsstands, tourist offices and places where English is spoken.

The Daily Press have being published by the old writer Mr. O. R. Bruce during 18 years, also it is free and can be had in the hotels.

If you want to read the Miami Herald or the New York Times, just go to the Sans Souci Candy Shop, on the ground floor of the Gran Hotel Costa Rica. There you will find almost all the magazines and paperbacks printed in the U.S. Chocolate lovers! Don't miss to visit that place.

Milk comes about an hour later. Milk is one of the big food bargains in Costa Rica, costing about 14c a quart. Dos Pinos is the favored brand and recommended by the Public Health



authorities. Their plant is completely modern and sanitary. Daily food shopping can be done at local "pulperias," neighborhood grocery stores; at super mercados, down-town larger grocery stores, or at the market, an experience in itself. Booths selling all sorts of fruits, vegetables, meat, and household supplies are only a little more crowded than the aisles. The unwary shopper may find himself being pushed right out of the market if he gets into the wrong traffic flow. There is constant chatter and hawking of wares. Small boys hover about saying "le llevo" — asking to carry the purchases. A variety of tropical fruits are available — anonas, guanabanas, papayas, nances, pejivalles, yucca, bread fruit, chayote, and pineapple. The nances are small yellow berries which are sold in little bags.

Pejivalles are boiled in salt water and taste similar to a chestnut. The chayote, a type of squash, is practically tasteless and nutritionless. Yucca and bread fruit too are of little nutritive value and are usually fried or cooked in fat to give them flavor.

Tuesday and Friday are official market days when the farmers bring in their produce. Trucks are lined up on all sides of the blocksquare market bringing traffic to a standstill. Noise is uninterrupted. Cages of live parrots and other tropical birds add splashes of color. Beggars are out in force and the shopper is slightly overwhelmed by the endless stalls piled high with food. The inevitable rice and beans punctuate the scene. The inexperienced shopper is left breathless and shaken by the venture. There is a fascination which cannot be resisted and the shopper finds herself looking forward to the next market day when she can again step cavalierly over the heaps of carrot tops and other vegetable refuge tossed there casually by the store-keeper. Who knows, she may be pinched again by some unknown in the crowd!

Exposure brings orientation and the shopper soon learns which stall has the best tomatoes, where the mangos are cheapest, and which shop-keeper will take advantage of the unwary buyer. Friendships between shopper and shop-keeper become warm and lasting and the best papaya is held out for a favored regular customer. God help the shopper who fails to bring her "bolsa" (shopping bag).

Most Josefinas ride the bus, for only the well-to-do can afford an automobile. Buses in San José represent private enterprise at its raucous best. The companies fight for route franchises and where the routes cross with another company they fight for riders. Some buses have a driver and a conductor and nearly every bus is full and running over. Men leap on and off while the bus continues on—nevertheless, the conductor usually gets his 20 centimos fare (three cents American).

Each bus has its own character elaborated by the driver and his aide. Likely as not, the bus is given a name after the fashion of naming airforce bombers. Steering wheels are laced with bright plastic strips; a picture of the driver's preferred saint hangs next to his mirror. Sometimes he decorates it with flowers, ribbons, or green boughs. On the larger buses in place of advertising placards there are cut-out pictures from current magazines.

The spirit of camaraderic prevails. Ladies and children get special attention, being offered seats and helped on and off. During the rush periods—morning, noon, and evenings—a rider may find himself squeezed in, face touching face with a perfect stranger—an admirable way of getting close to the people,

The drivers have caught the spirit of competition. Each bus, which has any paint on it, is polished assiduously between runs. Buses often race down the narrow streets and up the hills. Sometimes the drivers so catch the spirit of the race that they forget the passengers, passing those who are waiting at the corners and failing to hear the cries of "esquina" (my corner).

Diminutive taxis scurry about the town honking at prospective customers and seeming to pop up wherever and whenever needed. The meters start at 15¢ and seldom exceed 40¢ anywhere in the city.

Downtown the passerby is beset by lottery ticket sellers. As one wit put it: Costa Ricans can be divided into two groups: those who sell lottery tickets, and those who buy them. Some of the sellers are unusually persistent and will follow their prospect for half a block, waving their tickets under the prospect's nose and recounting the virtudes of their particular numbers. It is fatal to evidence the slightest interest in a ticket. "Aficionados" of the lottery decide that certain series of numbers have better chances to win and thumb through the salesman's sheaf of tickets looking for the one which will bring him easy wealth. The lottery profits go to hospitals and charity. Lottery day is Sunday. Winning numbers appear in Monday papers. The urge to gamble seems deep rooted, and Lacsa



On St. Joseph's Day, March 19, many people make the trip up to the tip of Poas Volcano. An enterprising vendor sells drinks, soft and otherwise.

Airlines has capitalized on it by setting up a Club of Fortune. Members pay \$2.00 a week which entitles them to a chance on a weekly drawing. Winners get a round trip ticket to Mexico or Miami, or \$169 to be applied on any other air trip.

The newcomer soon learns that his textbook Spanish is not enough to catch the local "street" language spoken at staccato rate. Country folk have their particular vocabulary also. A good way to pick up Spanish is to read the daily newspaper and attend the movies. Soon the arrival begins to hear the language and has little difficulty in asking simple questions and understanding the replies.

Nearly any day a visitor is likely to see a procession of people dressed in black, walking behind a black hearse drawn by black horses, covered with black netting. These funeral processions wind through the town and on to the city cemetery. For those who appreciate cemetery sculpture the San Jose cemetery offers the best in Central America.

As might be expected much of the life of San José centers about the Catholic Church. There are several beautiful churches. The Cathedral of San José sits in the Central Park. After Sunday evening mass hundreds of people walk or drive through the downtown streets dressed to the hilt. The Avenida Central becomes an extended Peacock Alley. Evidence of the seriousness with which religion is taken is seen in the well



Costa Ricons do not kill bulls in a buil ring, instead, during their December holidays following Christmos they harry and wear him down to the point where he is likely to drap from exhaustion. Six to eight bulls a day get their chance to jab at the amateur aficionadas who use gunny sacks or anything else at hand as matador cloaks.

tended shrines located about the city. Birthday presents are given on a person's birthday; also, sometimes, less frequent, presents are given on the birthday of the saint for whom the person is named. On Santa Maria's birthday, all Marias receive presents. Holy Thursday, Good Friday, St. Joseph's Day the Day of Our Lady of the Angels, Corpus Christi, and the Day of the Immaculate Conception are some religious holidays. The motorists should keep in mind that driving an auto on Good Friday during Holy week is considered bad taste.

Protestants of all denominations are welcome at the Union service held at the Methodist school from 5:00 to 7:30. Potluck supper, Sunday School, and church are combined. The Episcopal Church has its Central American bishopric at San José and a delightful church a block away from the Grand Hotel. The 7th Day Adventists and the Lutherans also hold services. The Methodist Church is next to the Capri Theatre. Their morning service is delivered in English—the evening service in Spanish.

Some secular holidays that are observed are Christmas, New Year's Day, April 11—the anniversary of the battle of Rivas, when the hero, Santa Maria, was killed. April 14 commemorates the founding of the Pan American Union; July 24—Simon

Bolivar's birthday.

Between Christmas and the New Year is the gala time of the year. "Parties are not considered a success," says a beautiful San José socialite, "unless they last until seven in the morning". There are fireworks, masked parades, marimba contests and the traditional "tope", a parade of two bands of handsomely caparisoned horsemen move from opposite directions to meet at a central point and parade through town. Athletic contests of various kinds—soccer, baseball, basketball, boxing, fencing, and bicycle races—are held. Morazan Park has concerts; people dance in the streets. Plaza Viquez is the center of gaiety: all-night stalls sell fritters, tacos, caramel apples; shooting galleries. Bingo, a standby moneymaker for every church charity "feria" or fair gets a big play.

The kindly Josefinos do not go in for bullfighting in which the bull is finally killed, and it is not democratic to let only one or two toreadors have all the fun. Bullfighting Costa Rican style lets anyone fight who feels the urge. Anything goes. Toreador capes are gunny sacks or what have you. The bulls chase everyone and everyone chases the bulls. The end comes when the bull is exhausted and several young men pile on him. The bull is just too tired to get up.

With the second of January the carrousels stop, the peddlers take down their stalls, the bullfighting is over, and San José returns to its quiet, everyday life.

When you are downtown and in need of a refreshment, stop at one of the "Sodas." They keep a complete assortment of refrescos. These ice and milk, or water, drinks have as a base various types of powders or fruit concentrates. List begins with avena (oatmeal) and ends thirteen items later with albaricoque (apricot). Some of the items may sound a little strange, such as cottonseed, powdered corn, and powdered barley. All are worth trying at 15c each. Besides the refrescos the places have an assortment of interesting pastries, sells ice cream, sundaes, and possesses a cafe expresso machine.

Travelers and newcomers to any foreign country expect to puzzle over the exchange rate for several days, and those in Costa Rica are no exception. Costa Rica's currency is based on the colon, roughly equivalent to 15 cents in U. S. money. Coins are issued in 5-10-25-50 centimos. \$\mathcal{C}\$ 1.00 and \$\mathcal{C}\$ 2.00. Ten centimos are worth about 1½ cents U. S. A. A quick and approximate way of mentally converting colones to dollars is to divide by eight. The official rate of exchange is 7.75 colones

to the dollar.

For luncheon try a place such as the Hotel Astoria or Canada. Their menus run like this:

Red Bean Soup
Boiled Rice and Red Beans
A 6-8 oz. Steak
Lettuce and Tomato Salad

Half an avocado Corn on the cob

Pineapple or Custard

Where can you get such a meal other than in Costa Rica for 75 cents?



New building of the Royal Dutch Hotel in central avenue — San José.

The new Royal Dutch Hotel has a Dutch chef who prepares International cuisine. Excellent food! A meal costs \$2.25. The bar is intimate and the entire hotel is operated with Dutch efficiency and sanitation.

For French food there is The Bastille, on Paseo Colon, the most expensive and perhaps the most elegant of San José



The Europa Hotel, one of several good hatels in San Jose. Owned and managed by the courieous brothers don Carlos and don Manuel Ventura.

restaurants. The Holland House, located on a hill at the edge of Barrio Escalante, gives substantial board and lodging for \$6.00 a day, rates for families. A kind of a small resort with cottages, it also has riding horses for rent.

The Europa Hotel is agreed to have very good food. The Canada Pensión, is the gathering place for many Americans and Canadians. Rate is \$7.00 a day, American Plan. Vesuvio has well recommended Italian food. For a strictly good service, Le Gourmet is tops. Managed by Don Pedro Duque and his wife.

For hotel accommodations the Gran Hotel Costa Rica has by far the most atmosphere and luxury. Prices range \$8.00 to \$16.00 double. Their suites are more than spacious and comfortable. It is the biggest—130 rooms—and is located most centrally. The Pan American is inexpensive, \$2.50-\$4.00, has plenty of local color. For a mountain atmosphere there are the La Catalina Holiday Cabins, near Heredia.

The person who really wants to learn about Costa Rica is



The entrance ta El Gran Hotel in San José, the leading hotel in the country which is located in the heart of the city.

well advised to rent a room with a private family, taking at least his breakfast there also. A fine room with meals runs about \$30 a month. La Nacion, a morning newspaper, always has several advertised.

Maybe you will be lucky and see a school parade. Both students and reviewers take the parades very seriously. Each student is dressed in the uniform of his school and there are fifes, drums and flags. It was a little strange to hear one corps burst forth with "Anchors Away."

Night life is elementary and closes shop early. There are a few night spots where boy meets girl, not the type frequented by members of the Baptist Young Peoples Union. The Balmoral Hotel sports a night club with success. Big entertainment for all citizens is the movies. Most of the films are controlled by the Raventós people who have tied up American, English, German, and Italian film showings. As a movie is brought to town the ads spare no superlatives, "a grand sensational," "a super-camera shot," "the most great and phenominal box office attraction," "the most extraordinary movie made." In describing a western hero the caption reads "A man with ice in his veins who knows how to kill and to die."

First showings appear at the Rex on central square, price 70¢. The movie is moved about the city showing at the Cali-



The famous National Theater is seen from across the park. This ornate structure was built at the turn of the century, weekly concerts and theatrical performances are affered.



An inside view of the main corridor of the National Theater, Imported Italian marble was widely used and Italian artists were brought over to paint the scenes on the ceilings and the various ante-chambers.

fornia for 60¢ around the circuit of neighborhood theaters until the price is dropped to 10¢. Sunday afternoon is movie time and many theaters show three different movies, at 3:00, 6:00 and 9:00. Movies are classified, according to one wit, into three grades: good, bad, and Mexican. A few travelling troupes of entertainers play the Central American circuit and once in a while there is a European troupe.

The National Theater, built around the turn of the century, is of baroque architecture, at its best. Concert performances are held periodically, as well as legitimate theater. Concerts by the National Costa Rican Symphony orchestra can be heard often. A tinge of old world pleasure suffuses the theater goer and he can imagine himself in full dress 50 years earlier when only the elite could afford the performance.

"Futbol," soccer, is the main Costa Rican sport, and fans take the game to heart. At a past game with the champions from



Every town and village has its church and football field. Costa Ricans are ardent players of the game which we know as soccer.

Mexico, some of the crowd fired up to the point where they burned two planes believing them to be the ones which brought the Mexican team. Imagine their chagrin when it was learned that they were really Costa Rican planes.

The city fathers planned well when they laid out San José



Quiet parks are a part of the San José scene.

and left plenty of room for parks. The Parque Central, Parque Morazan, The National Park, which lies adjacent to the Congress building, Parque Bolivar, are among the better known.

Visit Bolivar Park in San José. Designed as a miniature forest, its zoo contains jaguar, puma, giant tapir, harpy eagle, coatimundi, spider monkeys, peccary and the emerald-and-crimson quetzal, royal bird of the ancient Aztec.

Tennis players will want to join either the Tennis Club which sets beside the huge open Sabana, or the country club, located in Escazú. Tourist cards for both clubs can be easily nad. Both have pools, and the meals at the tennis club are especially good. Try their "bifsteak" for 90¢. Start the meal with a beer and a "boca". The boca may be a cracker with bean paste or cheese, sausages on top of tiny corn meal pancakes, or what have you. Be prepared for cold water in the pools and come early if you want to play tennis on Sunday mornings.

Radio stations cover the country—some 20 in San José—2 in Puntarenas, and at least one in each of the other towns. Programing is sedate and in keeping with the Costa Rican character, a far cry from the high-pitched song birds heard in some of the Latin countries. Classical music can be dialed at almost any time from either the large Catholic or Protestan stations.

There are three television stations, with good programs, made

in Mexico and the U.S., such as "The Untouchables", "Maverick", "Perry Mason", "Bewitched", "Dick Van Dyke", etc.

The national drink is beer and not cheap. Beer costs between 30 and 45 cents a bottle. John Bull, made by a new little brewery, by a German brewmeister, is excellent. The two other local beers, Selecta and Pilsen, are made by the same company. No grape wine is produced because grapes are grown only experimentally or in small quantities. All liquor, except beer, is a monopoly of the government, and a trip through the National Distillery is interesting. Some of the rum is good, and a large assortment of liqueurs can be had. Try Marañon, made from the fruit of the cashew tree. It is interesting to the palate. Also try Creme de Café or Crema de Nance made from a little yellow berry. "Guaro" is the poor man's whiskey and can be had for \$\mathbb{C}\$ 1.00 (15\mathbb{C}) an ounce. Forego Scotch unless you have plenty of money. 'The duty is heavy and the price is \$10 a bottle.

Addresses in Costa Rica are a mystery to most. Street numbers are something new and few people can interpret them. For example Ave 1 541 is a house located on 1st. Ave.,



San José cops dislike arguments and traffic violation tickets seem to be ineffective. The easiest way to reprimand a parking violator is to remove his license tag and let him retrieve it at the police station.

41 yards to the East of St. 5, or between Sts. 5 and 7. Most of the people prefer the easy way, or is it easy, of locating a house something as follows: "Al lado de la Lechería Montealegre, Barrio Escalante," which means the house beside the Montealegre Dairy Plant in Escalante Distric. Houses are always located with reference to an identifiable store, church or public building. When first moving to the city it might be just as well to make your address c/o the American Embassy until sure of your location.

No where, but no where are traffic cops as polite as in San José. A traffic violation may warrant a disapproving look by a policeman and a wagging of his finger. Sometimes a cop will salute an offender which indicates that there has been a violation, but that he understands. The worst that can happen is when a car is parked in a no-parking zone and the owner comes back to find that his license plate has been carefully screwed off and carried to the police station. An explanation is usually sufficient to get the ticket torn up and the plate back. The revolver carried by the policeman has given way to more civilized tools, the pliers and the screwdriver. Legal speed limit in town is 13 miles per hour, six miles per hour when passing through school zones.

There is a special code to be learned for barbershops. A No. 1 cut or "blanco" means very close on the sides, No. 2 leaves the usual length on the sides, more of a hair trimming, and No. 3 is strictly for the long hairs.

Nearly everyone who has an income of \$100 or more a month has a maid. They are standard equipment in all middle and upper class homes. Larger homes employ two, one to take care of the children, and one to do the housework. The pay is \$15 to \$30 a month. Those who want English speaking maids can get one by hiring a Negro, for nearly every Negro in Costa Rica is of Jamaican heritage and speaks English. Maids are more than servants, they become close friends and share the family's joys and sorrows. Homes are nearly always built with an additional bedroom and bath for the maid.

The cost of living in San José varies widely depending on the pattern of buying. A survey made by the U. S. Department of State in 1958 showed that, excluding housing, cost of living was 11% lower than in Washington, D. C. A person can live well on a budget considerably less than what was implied by the survey, but imported items should be avoided like the plague. A can of pork and beans, for example, costs

\$1.10, a can of tomato soup about the same.

In contrast, a beautiful T bone steak can be had for 45 cents a pound, bananas at a penny a piece, bread at 15 cents a loaf and milk at 15 cents a quart. A "market basket" survey of food costs made by Mrs. Lundberg is seen on this page.

MARKET BASKET SURVEY OF SAN JOSÉ FOOD PRICES, 1968

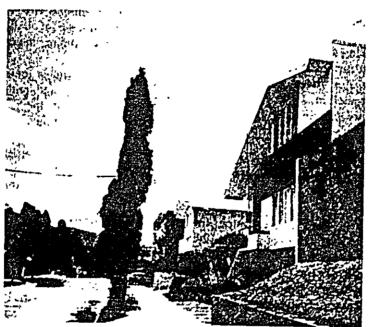
	Colones	Dollars
12 oranges	1.20	.18
6 bananas (large)	.50	.08
1 pineapple (large)	1.50	.23
1 large mango	.80	.12
1 small mango	.10	.015
1 lemon	.10	.015
1 lb. carrots	.40	.06
3 avocados	1.00	.15
2 bunches mustard greens	.50	.80
1 lb. green beans	1.50	.20
4 large beets	1.80	.27
1 lb. potatoes	.60	.09
1 green pepper	.25	.04
1 lb. tomatoes	.60	.09
1 cucumber	.30	.045
1 dozen eggs	4.00	.57
1 botella milk (1/5 gallon)	.70	.10
1 lb. butter	4.90	.70
1 lb. margarine	2.85	.40
1 loaf bread	1.00	.15
1 lb. Costa Rica coffee	3.60	.51
1 small bottle C. R. Vanilla	1.25	.18
1 oz. baking powder	.25	.04
1 lb. flour	.60	.09
1 lb. rice	1.00	.15
Peanut butter (small C. R.)	2.70	.40
Catsup-made in C. R.	2.40	.34
Mayonnaise (small) made in C. R.	2.30	.33
Cocomalt (1 lb. jar) made in C. R.	2.50	.35
1 bx. Jello made in C. R.	0.80	.115
1 small can cinnamon	1.50	.23
1 qt. ice cream	3.50	.50

1 bx. ontmeal (small)	2.25	.33
1 bx. Raisin Bran	3.25	.46
Sugar Snack Pack	4.25	.60
Giant Fab or Ajax	11.75	1.68
I large Ivory soap	2.75	.40
1 can Ajaz cleaner	1.60	0.23
Fruit cup 20 oz. made in C. R.	2.90	.40
Peas 16 oz. can made in C. R.	3.60	.50
Toilet tissue (1 roll)	.75	.12
Paper towels (pkg.)	4.00	.57
Bx. wax paper	2.75	.41
Cheese 1 pkg. (about 1/2 lb.)	3.00	.43
1 lb. ham (ready cooked)	9.50	1.33
1 lb. hamburger	2.00	.30
1 lb. ground beef (round)	2.75	.40
1 lb. steak (round	3.50	.50
1 lb. steak (sirloin)	4.50	.64
Hot dogs (pkg. of 5)	2.00	.30
1 chicken (2 lb. 5 oz.)	7.75	1.10

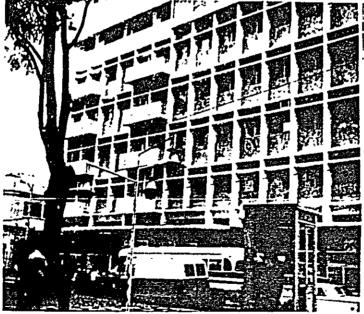
Cost of food is considerably less than in the United States—if you adapt. Build your meals around beef, rice, beans, milk, bananas, and fresh vegetables. Imported canned foods are incredibly costly.

The home builder can find a location to suit his temperament—downtown, a barrio (suburb) close to town, or he can live in one of the lovely little towns just outside San José. For those who aspire to live in beauty there is Bello Horizonte and Escazú. Escazú is the site of an Indian Village, which went about its business long before Columbus sailed along the Pacific coast. The American ambassador's residence is here, the gathering place on July 4th of several hundred Americans for a morning of cotton candy, hot dogs, beer and games. Close by is the Country Club, with its backdrop of hills and mountains.

Up from Escazú, Bello Horizonte looks across a thirty to forty mile valley: San José, Heredia and Alajuela, like fairy tale cities laid out in neat squares. Church spires add pinnacles of white against the darker houses and the green of the mountain slopes behind. The scene constantly shifts as light, shade and coloring changes, kaleidoscopic in effect. Clouds move off the mountain tops, rolling downhill, bringing rain to the valley. Hollywood Hills comes off a poor second by comparison with



A residential neighborhood of San José



One of the newer apartment houses in San José.

this setting Bello Horizonte is about a fifteen minute ride to downtown San José. Maids working in the houses of Bello Horizonte live in Escazú and walk home in the evenings down a dirt road in fifteen minutes.

For those who like village life Heredia or Alajuela offer something almost colonial. Quiet, clean towns. Land and rents are considerably less than in San José. Alajuela has the nation's biggest normal school. Both towns are within easy commuting distance of the capital.

Withing San José, Barrio Escalante and the Yoses district are preferred by Americans. Both sections are new and modern, well laid out, and some lots catch a pleasing view of the downtown distric or of the surrounding hills.

In the San José area, heating is never considered, unless it be a fireplace. In the Bello Horizonte area, which has an altitude of about 4,000 feet, an electric heater is in order, or one or two fireplaces to take the chill off the night air. The temperature never drops below 65° F. and many people merely don a sweater after the sun goes down or retire to bed. A stimulating climate, a friendly people, beauty in the hills and the simplicity of life are found in San José.

CHAPTER X

Public Health and Housing

For those who live in the San José area Dos Pinos milk, ice cream, and cheese are perfectly safe.

Public health generally is well supported by the Government. The Ministry receives some 10 million colones annually for its operation, another 10 million is allocated for hospitals, and the national lottery—gambling for a good cause—brings in about 26 million colones each year for hospitals.

Costa Rica has a good record regarding tuberculosis; it has the lowest incidence rate in Central America. The rate of decline in deaths per 100,000 people is marked in the last ten years. There are two good TB hospitals; treatment is completely free.

With the help of the United Nations malaria is finally being eradicated on the Pacific and Atlantic coasts.

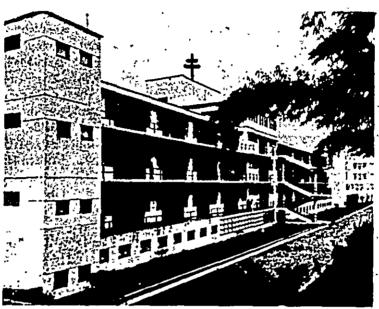
There is a good mental hospital in San José.

Headway is being made against venereal disease, although it is said that a high percentage of prostitutes are infected. The Red Cross has a station in downtown San José where anyone can walk in and get up to 600,000 units of penicillin at cost, about 80 cents.

For newcomers who suffer from intestinal upsets, a word of advice. Salmonella poisoning has its onset from three to several hours after the infected food has been eaten. Symptoms include headache, vomiting, diarrhea, sometimes fever. It is a good idea to go along with nature. The stomach and lower colon are trying to expel the contaminated food. Help them along by drinking warm water and taking an enema.

Pectin is soothing for such a stomach and can be had cheaply and quickly by eating mouthfuls of Sure-Jell, the dextrose and citric acid fruit pectin mixture for making jams and jellies. It can be had at the bigger "pulperias," grocery stores. Bananas are also good for diarrhea and strangely enough are a laxative as well. It seems that eating them regularly helps maintain the flora in the intestines at a proper level. Since prunes are expensive, bananas taken with milk before breakfast is a good way to keep regular.

Food intoxication caused by the omni-present staphlococcus



One of Costa Rica's two National Tuberculosis Hospitals. Costa Rica has the lowest tuberculosis rate in Central America.



Costa Rica has foced up to its mental disease problem by erecting this hospital and staffing it with expert physicians.

germ shows symptoms soon after eating. The staph germs themselves are not poison, but they excrete a toxin which causes the upset. Incidentally, this toxin is not destroyed by heat so do not be deceived into thinking that any food which is properly cooked is safe from contamination. Flies are carriers of both staph and Salmonella germs. Fly specks are the spit of a fly which must first put his food into a solution in order to draw it up his proboscus to eat it. Be careful with any alkali foods, especially cream pies, potato salads, ground meats of all kinds. Do not drink unpasteurized milk. Buttermilk "leche cultivada" is somewhat self purifying, as are hard cheeses, wine, and beer. Fresh vegetables, especially tomatoes, avocados and cucumbers are subject to amoebic contamination from handling. Better to peel them using purified water.

Some say "Why worry; you're going to get amoeba anyway." The truth is that nearly everyone is contaminated in one way or another. The crucial question is, how much?

The Ministry of Health makes periodic inspections of all hotels, restaurants and food fabricating plants. Sanitation is high by most Latin country standards, still low by U.S. standards.

Nutrition gets better each year. There is enough to eat but distribution can be improved. Then too, there is the question of cultural lag. The cheapest source of protein in the country is from fish. The National Production Council has pushed the fisheries industry and has supported the price of fish. In some cases the Council has bought fish at a certain price, processed and frozen it, sold it for a lower price. Yet people don't eat much fish because of the carry-over attitudes from the time when fish was not frozen, spoiled quickly and was likely to make the buyer ill.

Physicians in Costa Rica have social and financial status comparable to their colleagues in the States. The average income is about \$9,000, the highest of all professions there. Prestige is also high. Many of the country's physicians have studied in the States, speak English fluently and are more than gracious in treating foreigners.

Evidence that Costa Rica has progressive leadership in things medical is the fact that in 1959 live-polio vaccine was given to 500,000 children. Under the supervision of the U.S. Public Health Service, the shots were given as a large scale test of the effectiveness of the vaccine. Reports on the first 100,000 youngsters show successful immunization and not a

single adverse reaction.

Sometimes a little country can show its larger neighbors a thing or two. Costa Rica has built low cost housing for incredibly small investments, has helped establish communities in virgin territory and has made it possible for thousands of people to move out of slum dwellings into attractive homes located in planned communities which can be a lesson to all public housing authorities. In San José several thousand people now live in Hatillo, a public housing project. Enough land was purchased to eventually house 40,000.

The Housing Institute (El Instituto Nacional de Vivienda y Urbanismo) was established in 1954. As with all of the Costa Rican Institutes, it is semi autonomous with its Board

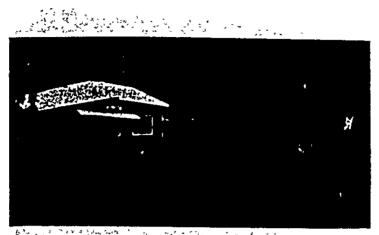


The family who lived in the shack to the left now lives in the little house to the right, thanks to help from INVU, the Government housing institute. Notice the neatness of the fence and yard.

of Directors appointed by the cabinet for periods of four years. The directors run the Institute and cannot be removed except for specific cause. Funds are fixed by law as being 3% of all the Government budget. House payments bring in additional revenue.

What is amazing about INVU, the alphabet title of the Institute, is the attractiveness of its housing at such very low cost. Many pleasant little homes have been built by the home owner with loans of less than \$600. The chief construction engineer states that building costs of houses range as follows: two-bedroom houses—\$1125 to \$1725; three bedroom homes—\$1275 to \$1825; four bedroom homes—about \$2300. These prices include the cost of the land.

Homes are sold on terms ranging from 12 to 30 years. Pay-



A 3750 loan was enough for a rural family to move from their shock, seen at right, into the home in the foreground. All the work was done by the family itself. The place is near Haranje, on the Inter-American Highway.

ments are gauged according to ability to pay; some families pay only \$1 a mon'h. In 1959 close to 4000 homes were built and occupied. In 1966 the INVU (National Housing Institute) had built 10,046 homes thoughout the country, at a cost of 131 million colones or 18.7 million dollars. Not all are urban. INVU has several planned rural communities around the country in which aid in selection of crops and other technical aid in agriculture has been given.

Hatillo is INVU's pride and joy, and rightly so. Located a mile and a half from downtown San José, a place formerly farm land and slum dwellings, it is a remarkable community, entirely planned and built by INVU. Critics of public housing should see what has been done at Hatillo. It is a model community. Gardens, well kept lawns, sparkling clean porches are everywhere, no exceptions.

"I thought that housing projects were always supposed to have a few families that use the bath tubs for coal bins and hang the laundry on the front porch," I commented.

"Not here," laughed INVU's purchasing agent who escorted me through the model community. "Of course, to begin with we used five social workers to explain good housekeeping and to develop community pride. Today there is only one social worker left, and she is not needed."

An attractive grocery store stands in the center of Hatillo, "That's our cooperative store," the purchasing agent pointed



A view of Hatillo, low cost housing project on the autokirts of San José. Houses cost less than \$3,000 yet are attractive and substantial.

out. "It was started by employees of INVU, is now operated completely by Hatillo residents."

We stopped at one of the houses. A beaming mother proudly took us through the house, showed us a back yard planted with flowers and vegetables. We could never have a house like this," she volunteered, "except for INVU."

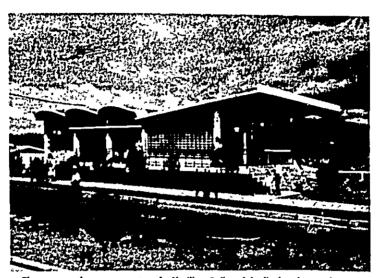
Here was a four bedroom home, one of the most expensive. Since the man of the family was a mechanic working for Sala, the airplane maintenance company, they could afford the top monthly payment of \$45.

In a country where land speculation is rife and where wages are low, the average person, no matter how hard he tries is unlikely to be able to collect enough money for a house. INVU makes both loans and builds houses. At one end of Hatillo were a group of houses going up, the work being done by a man here or there working alone.

"What kind of a project is that?" I queried.

"Self help homes," came the reply. INVU supplies the land and families can build their own homes, using INVU tools, during the hours they are free from their regular jobs."

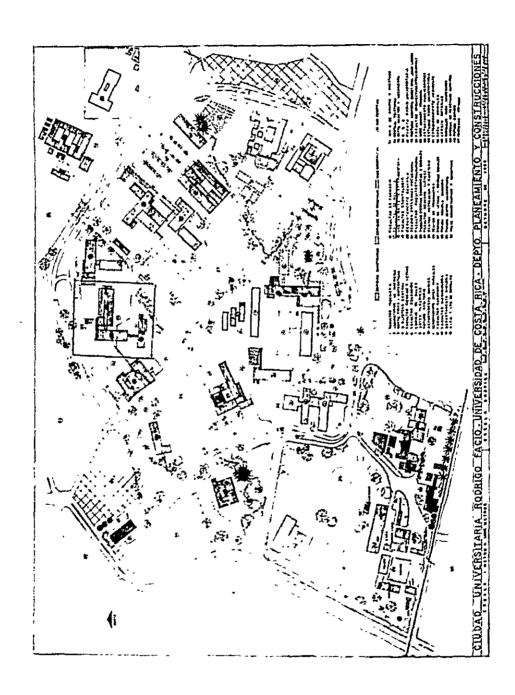
"I suppose everyone wants an INVU house."



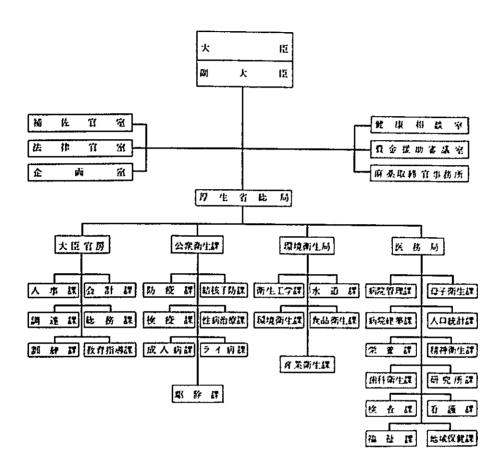
The cooperative grocery stare in Hatillo. Built originally by the employees of INVU, the stare is now cooperatively owned and managed.

"Yes, a lot of people do. Our social workers collect data from each applicant—income, present house condition, Educational level, ability to pay. Widows are given preference. Interest rates vary with the cost of the house—1% to very low cost, 3% for medium priced homes, and 6% for the highest cost places. In effect, the lowest cost housing is partially subsidized by the medium and high cost owners. The reason we can build so cheaply is our large buying power and the fact that carpenters and bricklayers get 40 cents an hour. Our civil engineers receive \$360 a month."

Because of the rapid increase in land prices INVU has looked ahead, purchased 1,000 acres in the suburbs of Hatillo, San José and sizeable land plots elsewhere around the nation.



厚 生 省 相 概 図



商等数育学校一覧表

1973年10月	MATRICULA INICIAL (学生数)	* 175.61	18.257	907	223	159	4.112 *	3.306	155	329
	CANTON (IB)		Montes de Oca	San Remón	Liberia	Turrialba		Heredia	Pérez Zeledőn	San Remón
	PROVINCIA (AN)		San José	Alajuėla	Guanacaste	Cartago		Heredia	San José	Alajuela
CENTROS DE EDUCACION SUPERIOR (水谷巻 行)	NOMBRE DEL CENTRO EDUCATIVO (学校名)	UNIVERSIDAD DE COSTA RICA	UNIVERSIDAD DE COSTA RICA Sede Central	UNIVERSIDAD DE COSTA RICA Centro Regional de San Ramón	UNIVERSIDAD DE COSTA RICA Centro Regional de Liberia	UNIVERSIDAD DE COSTA RICA Centro Regional de Turrialba	UNIVERSIDAD NACIONAL	UNIVERSIDAD NACIONAL Sede de Heredia	UNIVERSIDAD NACIONAL Sede de Pérez Zeledón	UNIVERSIDAD NACIONAL Sede de San Ramón

NOMBRE DEL CENTRO EDUCATIVO (学校名)	PROVINCIA (#)	CANTON (IIS)	MATRICULA INICIAL (学生数)
UNIVERSIDAD NACIONAL Sede de Liberia	Guanacaste	Liberia	322
ESCUELA DE ENFERMERÍA	San José	San José	705
ESCUELA TECNICA AGRICOLA-San Carlos	Alajuela	San Carlos	N.D.
INSTITUTO TECNOLOGICO	Cartago	Cartago	85
			(計) 24,143人

* = Cifra preliminar(概算) N.D. = No se dispone de información(不明)

 平均温度 (SAN JOSE)

 1942~1971年(30年間)の統計

月	温度	平均温度(度)	最高平均温度 (度)	及低平均温度 (度)
1	月	1 9. 2	2 3. 7	1 4. 6
2	月	1 9. 5	2 4. 4	14. 6
3	月	2 0. 3	2 5. 5	1 5, 0
4	月	2 0. 9	2 6. 1	1 5. 7
5	月	21. 3	2 6. 3	1 6. 3
6	月	21. 2	2 6. 1	1 6. 3
7	Я	2 0. 6	2 5. 2	1 6. ()
8	月	2 0. 8	2 5. 6	1 5, 9
9	月	2 1. 0	2 6. 2	1 5, 8
10	月	2 0. 7	2 5. 7	1 5, 7
11	月	2 0, 0	24. 5	1 5, 5
1 2	月	1 9. 4	2 3. 7	1 5. 1

 平均湿度(SAN JOSE)

 1952~1971年(20年間)の統計

月湿度	平均湿度(%)
1 月	8 0
2 月	7 9
3 月	78
4 月	7 8
5 月	8 2
6 月	8 5
7 月	8 4
8 月	8 4
9 月	8 5
10月	8 6
11 月	8 3
12月	8 2

 日 照 時 間 (SAN JOSE)

 1956~1971年(16年間)の 統 計

月日照時間	月間平均日照時間	1日平均日照時間
1 月	203.8 (11)	6. 6 (H)
2 月	214. 8	7. 6
3 月	2 3 <i>4</i> . 1	7. 5
4 月	2 0 5. 6	6. 8
5 月	159. O	5. 1
6 月	1 2 1. 0	4. 0
7_月	1 1 7. 3	3. 8
8 月	1 3 5. 2	4. 4
9 月	139. 2	4. 6
10月	1 2 6. 8	4. 4
11 月	132 7	4. 4
12月	172. 4	5. 6

コスタリカ共和国医療協力 実施調査団報告書

昭和49年2月

海外技術協力事業団
Overseas Technical Cooperation Agency
(0.T.C.A.)

