

ORGANIZATION OF KETTERING LABORATORY

Kehoe, Director

I. Experimentation. Personal direction of lead studies.

A. Problems under study or scheduled for study.

1. Toxicity studies - new lead compounds in gasoline
2. Study of physiological basis of lead hazards in general and public health aspects of leaded gasoline.
 - (a). The limits of safety in terms of the levels of lead absorption compatible with an equivalent excretion. Experiments on human lead ingestion.
 - (b). The study of garage mechanics, and selected cases of maximal exposure to exhaust gas in poorly ventilated sites.
 - (c). Cooperative studies in lead plant (Bunting, Brass and Bronze)
 - (d). Lead in foods - natural and as contaminant.
 - (e). Normal levels of lead intake and output in the general population, coincident with maintenance of observations on field representatives of E. G. Corporation unexposed or slightly exposed to lead.
 - (f). Variations in lead of blood in normal persons and in urine in relation to the blood.
3. Studies on lead poisoning. Hospital and referred cases, clinical picture, and influence of eliminative and depository therapy.
4. Studies of actual occupational lead exposure in relation to tetraethyl lead, Ethyl and Q Fluids and leaded gasoline, (i. e. manufacturing employees (assistance of Machle), mixing personnel, tank cleaning crews and pump repairmen), by examination of excreta, sludges, scale, deposits and decomposition products.

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B. Laboratory Staff assigned primarily to lead studies under the Director.

1. Thamann - Lead analyst in charge of chemical laboratory and secondarily responsible for coordination of spectrographic and dithizone laboratories, on general instructions of Director.

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| 1 a | McNary, Huettnner, Michels, Schlecht - Chem. Lab. | |
| 2. and 2 a | Cholak | Spectrographic Laboratory |
| 3. and 3 a | Hubbard | Dithizone Laboratory |
| | Pathological technician as required | |

4. Duval - Technical assistant - in general charge of care of animals.
Blood microscopist - secondary coordination with Sanders hematological studies.

- 1 a Blackston - animal caretaker - part time

II. Administration

A. Secretarial and Stenographic staff

Miss Sheppard and an assistant to be engaged as of January 1st with division of duties. Assistant probably to be given responsibility for checking in samples for analysis, requisition of supplies and maintenance of catalogue files, purchasing correspondence and analytical reports.

- B. Library, librarian, maintained literature study, abstracts etc. Miss Conway.

- C. Authorization of expenditures for equipment, supplies, books and maintenance. Budget, salaries, laboratory policy, new experimental projects.

Thamann - Assistant in purchasing.

Huettnner- In charge of shop work in maintenance, construction and repair of equipment.

- D. Cleaning staff and wash boy -
Doty, Grider, Blackston.

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III. General Advisory Capacity with responsibility for coordination of technical and analytical facilities in relation to general work of laboratory.

A. Machle, General Assistant and Consultant to Director.

1. Experimentation. Direction of toxicological studies on acid gases, organic vapors and dusts.

(a) Problems under study or scheduled for study.

- (1) Lead and exhaust gas. Streets and tunnels, exhaust gas in air, lead deposition in street and highway dusts, and on vegetation. The ultimate fate of lead in combustion products. Review of certain aspects of previous exhaust gas studies.
- (2) Dusts in gasoline storage tanks
- (3) Toxicological significance of iso-propyl-ether.
- (4) Irritant effects of HCl
- (5) Bacteriological studies and other problems of choice.

(b) Laboratory staff assigned to work under direction of assistant Director.

- (1) Scott, Treon and technical assistant to be provided, the latter to be trained in preparation of tissue sections, and to be assigned to this work by the assistant Director as indicated.
- (2) Other assistance to be allocated temporarily or permanently as indicated by developments.

B. Kitzmiller - Pathologist - Part time. To provide routine histo-pathologic service in relation to the general experimental program. Technical assistance in preparation of sections provided by Story and/ or technical assistant to be employed.

C. Sanders - Essentially independent. Answerable to Director for maintenance of routine studies of blood in relation to lead absorption.

1. Experimentation.

(a) Problems under study.

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- (2) Field study of pump repair situation with collection of clinical data, samples of blood and excreta of exposed men, and other materials of interest in relation to problem. Samples to be scheduled through laboratory by Director.

(b) Laboratory staff assigned to Sanders.

Hancock - haematological technician.

D. Henne - Consultant in Organic chemistry with no assigned staff. Mutual cooperation between him as representative of Midgley Foundation and the Director and Assistant Director in the pursuit of problems of mutual interest, if relationship maintained. Regular visits to laboratory to be discontinued.