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## Hepatic Blood Flow In The Dogfish, Squalus acanthias.

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Pursuant to a general hemodynamic study by us on the dogfish, Squalus acanthias, an effort was made to evaluate the hepatic blood flow using the technique and theoretical framework developed by S. E. B. Radioactive Rose Bengal was used as a test substance, which dialysis tests showed completely bound to dogfish plasma proteins. The study expanded into problems of hepatic and renal function, and a critical analysis of the hematocrit. Under the experimental conditions employed, the dogfish hematocrit varies in different blood vessels.

## Chemical Colorimetry of Squalus acanthias Bile.

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The chemical colormetry of bile is impeded by the color of bile. The following empirical methods were developed to effect a complete separation of dogfish bile pigment and bromsulfalein or phenol red. The method for phenol red resulted from a suggestion by E. K. Marshall, Jr.

I Bromsulfalein: dilute bile, 1 ml in 10 in a graduate centrifuge tube; add 5 ml butanol and 1 ml HC1 (1 ml conc. in 100 ml water); shake and centrifuge. The green pigment will go into the butanol, and all the BSP will be left in the aqueous phase. Alkalize as desired for colorimetry. A graduated tube is necessary to keep tract of volume changes of the aqueous phase.

II Phenol Red: dilute bile 1 in 10; add 0.5 saturated Zinc sulphate solution and 0.5 ml 1 N, NaOH; centrifuge. Use graduated centrifuge tube.

The bile pigment alone will combine with the gel.

## Studies of Trimethylamine Oxide Excretion In The Dogfish. III. Tentative Identification Of The Volatile Amine In The Urine Of The Dogfish (Squalus acanthias)

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The occurrence of a volatile amine in dogfish urine which is not ammonia has been reported by us in an earlier abstract (M. D. I. B. L..