This report covers the first academic year in which the Department of Physiology has been located on this campus. The move from Lawrence into Wahl Hall East took place in July 1962. The only member of the former staff to make the move to Kansas City was Dr. Norman Loofbourrow. September 1, 1962, Dr. Alan Thompson from Iowa State University joined our staff as an Associate Professor, and Dr. Lawrence Sullivan transferred from the Department of Pharmacology as an Assistant Professor. The academic staff consisted of the following persons:

E. B. Brown, Jr., Ph.D., Professor and Chairman
Alan M. Thompson, Ph.D., Associate Professor
Norman Loofbourrow, Ph.D., Assistant Professor
Lawrence Sullivan, Ph.D., Assistant Professor

Postdoctoral Fellows:
Dr. Virginia Tucker, Department of Pediatrics, KUMC
Dr. Wm. Smith, Division of Neurosurgery, KUMC
Dr. Benjamin Razon, A.I.D. Fellow, Associate Professor of Physiology, Far Eastern University, Manila, Philippines.

Graduate Students:
Robert W. Hamilton, Jr.
Richard L. Clancy
Robert Thurber
Michael Moller
Dale Mayhew

Dr. Hiroshi Aoki, a Postdoctoral Fellow in Surgery from Japan spent the year in the Department of Physiology working on a joint research project under the auspices of Dr. C. F. Kittle and Dr. Brown.

TEACHING:
Considerable time was spent in conference with the Chairmen of the Departments of Anatomy and Biochemistry in reorganizing the first year Medical School courses. A separate course in all areas of physiology, with the exception of neurophysiology, was organized. A joint offering in Basic Human Neurology, which consisted of Neurophysiology and Neuroanatomy, was left in the curriculum. The first year Medical School course was organized in such a fashion that physiology, biochemistry, and histology were offered during the fall quarter, with physiology and biochemistry continuing into the winter quarter. The
last two weeks of the winter quarter were devoted to an integrated endocrinology course. The spring quarter was devoted exclusively to morphology with exception of the Basic Human Neurology course which extended into that quarter.

After approval by the Graduate School Council the offerings of the Department of Physiology were as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>270</td>
<td>Medical Physiology (Fall)</td>
<td>7</td>
</tr>
<tr>
<td>271</td>
<td>Medical Physiology (Winter)</td>
<td>4</td>
</tr>
<tr>
<td>276</td>
<td>Basic Neurology (Spring)</td>
<td>9</td>
</tr>
<tr>
<td>279</td>
<td>Endocrinology</td>
<td>3</td>
</tr>
<tr>
<td>282</td>
<td>Advanced Topics</td>
<td>1-7</td>
</tr>
<tr>
<td>286</td>
<td>Reproductive Physiology</td>
<td>5</td>
</tr>
<tr>
<td>287</td>
<td>Readings in Reproductive Physiology</td>
<td>6</td>
</tr>
<tr>
<td>320</td>
<td>Fluid, Electrolyte, and Acid-Base Metabolism</td>
<td>3</td>
</tr>
</tbody>
</table>

The Basic Human Biology course for nurses was taught in Lawrence.

The principal load of lecturing to the medical students in courses 270-271 was, of course, carried by the four senior staff members of the Department. However, several lectures were given by staff members from other departments. These included Dr. C. Frederick Kittle, Department of Surgery, Dr. Wm. Ruth, Department of Medicine, Dr. Marvin Dunn, Department of Medicine, Dr. Kurt Reissmann, Department of Medicine, Dr. Al Lemoine and Dr. James T. Robinson Department of Ophthalmology and Dr. Charles Brackett, and Dr. Arnold Schoolman, Department of Neurosurgery.

Four graduate courses were organized and plans were made to add two more to this list when additional staff joined the department. These six courses would be presented, one each quarter, on a two-year rotating basis. The first of these courses, "Fluid Electrolyte, and Acid-Base Metabolism", was offered during the Spring Quarter by Dr. Brown.

During the year two elective courses were offered: "Potassium Metabolism and Acid-Base Balance" by Dr. Brown, and "Renal Physiology" by Dr. Sullivan.

A Surgery-Physiology Conference for students and Staff was held each week during the academic year.
New equipment had been ordered during the early months of 1962, and this equipment was received at various times during the spring and stored in a vacant room until we moved into the new building. Much of the summer of 1962 was spent in uncrating and checking out the new equipment and writing the experiments to be carried out by students in the laboratory in September. Much help was received from two medical students, who had been employed for the specific purpose of checking out equipment, and trying out the experiments as they were being prepared. These students were sophomores Ray Schmidt and Al Moorhead. Two Sophomore medical students also spent the summer of 1962 carrying out certain projects or joining in research projects already underway. These were Ralph Kauffman and Murray Corbin.

RESEARCH:

Research projects active during the year were the following:

Potassium Metabolism and Acid-Base Balance, USPHS Grant #5649, Principal Investigator: E. B. Brown, Jr., June 1, 1962-May 31, 1963. $16,330.


Effect of pH Upon a Renal Excretion of Weak Acids and Bases. USPHS Grant #H-6974, Principal Investigator: Lawrence P. Sullivan, January 1, 1962-December 31, 1963, $9,487.

Tissue CO₂ Chemical Forms and Exchange Rates. USPHS Grant GM 10429, Principal Investigator: Alan M. Thompson, June 1, 1962 - August 31, 1963, $17,250.

Hydrogen Ion Retention in Diabetic Acidosis and Ketosis. USPHS Grant #AM 06570-01, Principal Investigator: Dr. Virginia Tucker, Co-principal Investigator: E. B. Brown, Jr., September 1, 1962- August 30, 1963, $12,328.

During the year one graduate student, Mr. Richard Clancy, was supported on a USPHS Predoctoral Fellowship, and one Postdoctoral Fellow, Dr. Virginia Tucker, was supported on a USPHS Postdoctoral Fellowship.

PUBLICATIONS:

Publications by members of the staff during the period of July 1, 1962 to June 30, 1963:


ACTIVITIES OF STAFF:

Member NIH Physiology Fellowship Panel.
Faculty member for two-day symposium on Acid-Base Balance, VA Hospital, Minneapolis, October, 1962.
Presented paper at FASEB meeting, Atlantic City, April, 1963.

Dr. Thompson: Served as Review Editor on several occasions for "Science".

Dr. Loofbourrow: Delivered three lectures to Graduate Evening Course on "Autonomic Nervous System."

Dr. Sullivan: Gave lecture as part of "Renal Function Workshop" at annual meeting of Am. Assoc. of Clinical Pathologists, Chicago, September 1962.

Dr. Virginia Tucker: Read paper before Society for Pediatric Research, May, 1963, entitled "Chronic Diarrhea with Hypochloremic Alkalosis."