



Guide to the Knut Schmidt-Nielsen Papers, 1939-1994 and undated

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Summary

Collection Title:

Knut Schmidt-Nielsen papers, 1939-1994 and undated

Creator:

Schmidt-Nielsen, Knut, 1915-

Abstract:

Biologist whose main area of research was in animal physiology, particularly that of the camel. Schmidt-Nielsen spent the bulk of his career at Duke University, from 1952 to 1995, during which he published approximately 300 articles, and key works such as *Animal Physiology, and Scaling: Why Is Animal Size So Important?* Collection contains correspondence, research notes, field data, published materials, lecture notes, memos, reports, grant applications, and other materials. The papers span the years 1939-1994, documenting Schmidt-Nielsen's active research and teaching careers.

Extent:

18 Linear Feet
13,500 Items

Physical Location:

For current information on the location of these materials, please consult the Library's online catalog.

Language:

English

Language:

Material in English, Norwegian, and German

Collection ID:

RL.01148

Permalink:

<http://library.duke.edu/rubenstein/findingaids/schmidtnielsen/>

Preferred Citation

[Identification of item], Knut Schmidt-Nielsen Papers, David M. Rubenstein Rare Book & Manuscript Library, Duke University

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Background

Scope and Content

The Knut Schmidt-Nielsen Papers span the years 1939-1994, documenting the life and work of this prominent animal physiologist and educator. Formats include correspondence, research notes, field data, published material, lectures, memos, reports, grant applications, and other materials. Schmidt-Nielsen spent most of his career at Duke University where he served on faculty from 1952 to 1995, studying comparative animal physiology and environmental conditions in the desert, particularly in the Sahara and North Africa, with a particular interest in the camel. In addition, Schmidt-Nielsen was active as a lecturer and as a member of various biological organizations, including the International Union of Physiological Sciences and the Interunion Commission on Comparative Physiology, as well as being heavily involved with the publication of *News in Physiological Sciences*. Also documented is Schmidt-Nielsen's active role as teacher and advisor, and his involvement in the Duke University Nixon Library Committee. The collection is divided into the following series: Animal Physiology Research, Correspondence, Engagements, Graduate Student, International Union of Physiological Sciences, *News in Physiological Sciences*, Publications, and Subject Files.

The **Animal Physiology Research Notes Series** contains materials from Schmidt-Nielsen's research trip to the Sahara in 1953 and 1954, including correspondence, data, and journal entries. The **Correspondence Series** is by far the largest in the collection, and contains both official professional correspondence as well as scientific discussions and other related material. Much of the early correspondence is in Norwegian. The **Engagements Series** documents lectures given by Schmidt-Nielsen from throughout his career, including lecture notes, slides, and diagrams. Schmidt-Nielsen's teaching work is documented in the **Graduate Student Series**, chiefly his interactions with graduate student advisees. The **International Union of Physiological Sciences Series** houses materials from Schmidt-Nielsen's involvement with this organization, of which he was president from 1980 to 1986. The series includes minutes, memos, reports, correspondence, and other related materials. The **News in Physiological Sciences Series** consists of material related to the publication of this journal. In the **Publications Series**, there are copies of nearly every article Schmidt-Nielsen published. The **Subject Files Series** contains miscellaneous material grouped by subject regarding organizations, grant applications, and topics in animal research. Another small series, the **Translations Series** houses 33 published translations of a selection of Schmidt-Nielsen's textbooks. Finally, the **Audiovisual Series** houses three sound recordings of conference talks given by Schmidt-Nielsen during the

1960s. Original recordings are closed to use; please contact Research Services staff concerning access.

Unprocessed addition (2006-0026) (11,468 items, 18 lin. ft.; dated 1902-2003) comprises personal and professional correspondence, subject and genealogy files, lecture notes, calendars, clippings, and photographs. The addition is not represented in the finding aid, but a preliminary inventory is available on request. For research access, please contact the Research Services staff.

Biographical/Historical

Chronology List

Date	Description
1915 Sept. 15	Born in Trondheim, Norway
1933-1937	Attended University of Oslo
1946	Received D.Phil. from University of Copenhagen
1949-1952	Assistant professor at University of Cincinnati
1952	Became a United States citizen
1952-1995	Professor at Duke University
1953	Awarded Guggenheim fellowship
1970	Published Animal Physiology
1984	Published Scaling: Why Is Animal Size So Important?
2007 Jan. 25	Died in Durham, North Carolina

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Administrative Information

Publication Statement

David M. Rubenstein Rare Book & Manuscript Library

411 Chapel Drive

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Durham 27708

askRL@duke.edu

URL: <http://library.duke.edu/rubenstein/>

Access Restrictions

Collection is open for research.

Researchers must register and agree to copyright and privacy laws before using this collection.

Original audiovisual materials are closed to patron use. Technical Services staff need to produce use copies before contents can be accessed.

All or portions of this collection may be housed off-site in Duke University's Library Service Center. There may be a 48-hour delay in obtaining these materials.

Please contact Research Services staff before visiting the David M. Rubenstein Rare Book & Manuscript Library to use this collection.

Use Restrictions

The copyright interests in this collection have not been transferred to Duke University. For more information, consult the copyright section of the Regulations and Procedures of the David M. Rubenstein Rare Book & Manuscript Library.

Acquisition Information

The Knut Schmidt-Nielsen Papers were received by the David M. Rubenstein Rare Book & Manuscript Library as a gift in 1994, 2001, and 2006.

Processing Information

Processed by Lauren Hunt and Ioanna Zlateva, July 2007

Encoded by Paula Jeannet, Dan Ruccia, and Ioanna Zlateva, July 2007

Accessions 1994-015, 1994-087, 1996-0026, and 2001-0075 were merged into one collection, described in this finding aid. Addition 2006-0026 is unprocessed but available for research. Please contact the Research Services staff before coming to use this collection.

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Names and Subjects

- Physiology -- Study and teaching (Higher)
- Physiologists -- United States
- Zoologists -- Correspondence
- Physiology, Comparative
- Duke University. Zoology Dept
- Duke University. Nixon Library Committee
- Sahara -- Environmental conditions
- Northern Africa -- Environmental conditions
- Animal mechanics
- Duke University -- Faculty
- Camels
- Sound recordings
- International Union of Physiological Sciences
- News in Physiological Sciences
- Interunion Commission on Comparative Physiology
- Schmidt-Nielsen, Knut, 1915-

Collection Inventory

Animal Physiology Research Series, 1952-1956

Physical Description: 1 box

Scope and Contents note

Contains folders of correspondence, data, and other supporting documents related to Schmidt-Nielsen's research on desert animals in the Sahara between August 1953 and July 1954. The folders are divided into two groups, general information and data, and are arranged alphabetically within the groups. His personal correspondence and journal entries are available in a bound format

within the series. The data folders contain experiment results and research notes on camels, donkeys, rodents, and plants.

Animal studies--general, 1952-1954 Box 1

Physical Description: 15 folders

Animal studies--data, 1953-1956 Box 1

Physical Description: 16 folders

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Awards and Diplomas Series, 1947-1990

Physical Description: 1 folder

Diplomas, awards, and honors Oversize-folder 1

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Correspondence Series, 1939-1985 and undated

Physical Description: 16 boxes

Scope and Contents note

Includes scientific inquiries and invitations; professional correspondence with colleagues, researchers, publishers, and graduate students; and letters of recommendation. Interspersed in the series are vitae and statements of plans, grant application materials, copyright releases, requests for plant and animal samples, occasional newspaper clippings, photographs, and postcards. The 1948-1952 correspondence with the Office of Naval Research contains grant application files. Correspondence from Schmidt-Nielsen's stay in Algeria in 1953-1954 documents logistics and field work during the trip. Duke University correspondence includes records of departmental procedures, graduate students documentation, and requests for lab equipment. An extensive portion of the early correspondence is in Norwegian; occasional documents are in French, German, or Spanish. The folders are labelled and arranged alphabetically by last name or subject. Additional professional correspondence can be found in other series, particularly the International Union of Physiological Sciences and the News in Physiological Sciences Series.

1939, 1946-1947 Box 2

1946-1947 Box 2

Physical Description: 9 folders

1948-1952

A-O	Box 2
Physical Description: 39 folders	
1948-1952	Box 3
O-Z	Box 3
Physical Description: 22 folders	
1952-1953	Box 3
Physical Description: 50 folders	
1953-1954	Box 4
A-T	Box 4
Physical Description: 36 folders	
Trip to Algeria	Box 4
Physical Description: 12 folders	
T-Z	Box 4
Physical Description: 7 folders	
1955-1960	
A	Box 4
Physical Description: 1 folder	
1955-1960	Box 5
A-D	Box 5
Physical Description: 5 folders	
Duke University	Box 5
Physical Description: 4 folders	
E-R	Box 5
Physical Description: 27 folders	
1955-1960	Box 6
R-Z	Box 6
Physical Description: 15 folders	
1960-1964	

A-D	Box 6
Physical Description: 22 folders	
Duke University	Box 6
Physical Description: 3 folders	
E-G	Box 6
Physical Description: 5 folders	
1960-1964	Box 7
H-Z	Box 7
Physical Description: 37 folders	
1964-1968	Box 8
A-D	Box 8
Physical Description: 27 folders	
Duke University	Box 8
Physical Description: 14 folders	
E-G	Box 8
Physical Description: 7 folders	
1964-1968	Box 9
H-S	Box 9
Physical Description: 34 folders	
1964-1968	Box 10
S	Box 10
Physical Description: 7 folders	
South Africa	Box 10
Physical Description: 5 folders	
S-Z	Box 10
Physical Description: 13 folders	
1968-1973	
A-C	Box 10
Physical Description: 11 folders	

1968-1973	Box 11
D	Box 11
Physical Description: 6 folders	
Duke University	Box 11
Physical Description: 12 folders	
D-L	Box 11
Physical Description: 36 folders	
1968-1973	Box 12
M-Z	Box 12
Physical Description: 48 folders	
1974-1979	Box 13
A-H	Box 13
Physical Description: 35 folders	
1974-1979	Box 14
H-S	Box 14
Physical Description: 37 folders	
1974-1979	Box 15
S-Z	Box 15
Physical Description: 19 folders	
1979-1985	
A-D	Box 15
Physical Description: 21 folders	
Duke University	Box 15
Physical Description: 9 folders	
D-E	Box 15
Physical Description: 3 folders	
1979-1985	Box 16

F-N	Box 16
Physical Description: 40 folders	
National Academy of Sciences	Box 16
Physical Description: 5 folders	
O-S	Box 16
Physical Description: 14 folders	
1979-1985	Box 17
S-Z	Box 17
Physical Description: 15 folders	

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Engagements Series, 1948-1994

Physical Description: 3 boxes

Scope and Contents note

Contains records of Schmidt-Nielsen's participation in scientific meetings and conferences, as well as individual lectures and presentations. A large part of the series is comprised of Schmidt-Nielsen's lecture notes, diagrams, and slides; complete drafts of presentations are less common. Subjects of the lectures include: physiology and adaptations of desert animals; breathing and locomotion; and scaling and size in biology. Also included are conference-related materials, such as correspondence, brochures, and posters. Extensive material is available for the conference on Scaling in Biology held at Duke University in 1973. Interspersed through the series are records from the annual International Conference on Comparative Physiology. A few documents are in French, German, Japanese, and Norwegian. Folders are labelled by date of event and topic, and are arranged chronologically by month of the year. A separate folder at the end of the series contains a complete chronological list of lectures given by Schmidt-Nielsen.

1948-1963	Box 17
Physical Description: 43 folders	
1963-1973	Box 18
Physical Description: 48 folders	
1973-1980	Box 19
Physical Description: 61 folders	

1980-1989	Box 20
Physical Description: 56 folders	
1989-1994	Box 21
Physical Description: 30 folders	

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Graduate Student Series, 1953-1986 and undated

Physical Description: 3 boxes

Scope and Contents note

Documents Schmidt-Nielsen's role as an instructor and mentor to graduate students. The series contains personal and official correspondence, application files, and letters of recommendation. The student files often include research proposals, proposals for programs of graduate, tutorials, exams, and other written work submitted by students, with comments from Schmidt-Nielsen. Interspersed are funding files and financial documents. Folders are arranged alphabetically by last name of student. Note: materials are open for use, but are covered by privacy and confidentiality agreement which must be signed by researchers.

A-B	Box 21
Physical Description: 7 folders	
C-P	Box 22
Physical Description: 24 folders	
P-R	Box 23
Physical Description: 13 folders	

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International Union of Physiological Sciences Series, 1953-1986, bulk 1980-1986, and undated

Physical Description: 7 boxes

Scope and Contents note

Consists of materials and correspondence pertaining to the administrative organization and activities of the International Union of Physiological Sciences (IUPS), divided into three subseries: General Information, Meeting Notes, and Correspondence. The General Information Subseries pertains to the period during which Schmidt-Nielsen served as President of IUPS, from 1980 to 1986,

and includes meeting minutes, membership lists, memos, reports, and speeches, arranged alphabetically by topic and chronologically within topics. The Meeting Notes Subseries detail the planning and arrangements for international congresses and include programs, lists of participants, and presentation titles; the subseries is arranged by year of event. The Correspondence Subseries includes individual correspondence and memos related to different activities of IUPS and is arranged alphabetically. This series also contains some material in German, French, and Japanese.

General Information Subseries, 1953-1986, bulk 1975-1985, and undated

Box 23

Commissions, 1980, 1983-1985	Box 23
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Congress notes, 1977-1986	Box 23
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Physical Description: 7 folders

Constitution, 1980, 1985	Box 23
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Committee on Space Research, 1982, 1984	Box 23
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Council notes, 1953-1983, bulk 1980-1983	Box 23
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Physical Description: 4 folders

Council notes, 1980-1986	Box 24
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Physical Description: 10 folders

unspecified	Box 24
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Educational programs, 1980, 1984	Box 24
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unspecified	Box 24
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Executive Committee meetings, 1980-1985	Box 24
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Physical Description: 8 folders

Expenses and finances, 1980-1985	Box 24
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Physical Description: 5 folders

Interunion Commission, 1975-1985	Box 24
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Physical Description: 19 folders

International Union of Biological Sciences (IUBS), 1976-1981	Box 24
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Physical Description: 2 folders

International Union for Pure and Applied Biophysics (IUPAB), 1978-1980	Box 24
IUPS Council members, 1974-1982	Box 24
Physical Description: 2 folders	
IUPS Council members, 1976-1981	Box 25
Physical Description: 13 folders	
Newsletter, 1978 May	Box 25
News in Physiological Sciences Proposal, 1983-1984	Box 25
Nominating Committee, 1981-1982	Box 25
US National Committee for IUPS, 1975	Box 25

Meeting Notes Subseries, 1961-1986, bulk 1972-1983, and undated

Assorted meeting notes, 1961, 1964-1971, 1977	Box 25
1972, Italy	Box 25
Physical Description: 4 folders	
1974, Switzerland	Box 25
Physical Description: 12 folders	
1976, Switzerland - 1976	Box 25
Physical Description: 6 folders	
1978, Switzerland	Box 26
Physical Description: 15 folders	
1980, Denmark	Box 26
1983, Sidney	Box 26
Physical Description: 30 folders	
1986, Vancouver	Box 26

Correspondence Subseries, 1977-1990, and undated

A	Box 26
Physical Description: 3 folders	
A-K	Box 27
Physical Description: 33 folders	
K-S	Box 28
Physical Description: 21 folders	
S-Z	Box 29
Physical Description: 19 folders	

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News in Physiological Sciences Series, 1979-1990 and undated

Physical Description: 3 boxes

Scope and Contents note

Contains materials related to Schmidt-Nielsen's work with News in Physiological Sciences, including correspondence between Schmidt-Nielsen and editors, authors, and publishers; administrative documents; notes, manuscripts, corrected drafts, and occasional published articles. Folders arranged alphabetically by subject title.

Advertisements, 1986, and undated	Box 29
Agreement, 1983-1985	Box 29
Articles, suggestions, 1986	Box 29
APS archives, 1986-1990	Box 29
Authors, 1985-1986	Box 29
Budget, 1985-1986	Box 29
Cambridge University Press, 1983	Box 29
Complimentary copies, 1985	Box 29
Correspondence, 1980-1990	Box 30
Physical Description: 42 folders	

Editorial work, 1982-1988 Physical Description: 11 folders	Box 31
Final report, 1988	Box 31
Guidelines for authors, 1986	Box 31
IUPS commission chairmen, 1984	Box 31
Launching committee correspondence, 1984	Box 31
Letters, 1986-1988 Physical Description: 3 folders	Box 31
Lists of board members and editors, 1986-1987	Box 31
Managing board, 1986 Physical Description: 2 folders	Box 31
Manuscript for Nobel - The Award of the Prize, 1987	Box 31
Meeting notes, 1984, 1986 Physical Description: 2 folders	Box 31
Memos, 1986, 1988 Physical Description: 2 folders	Box 31
Name, cover page, contents, undated	Box 31
Photocopies, 1986, 1988	Box 31
Preliminary discussion notes, 1983	Box 31
Publication, 1979-1981	Box 31

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Publications Series, 1936-1986

Physical Description: 2 boxes

Scope and Contents note

Consists of articles published by Schmidt-Nielsen throughout his career, and includes a full publication list at the beginning of the series. Each article is presented in its final published form, either as a reprint or a full journal, with

no notes, manuscripts, proofs, or revisions. Some articles are in German and Danish. Folders are labeled and arranged chronologically by year.

1936-1959 Box 31

Physical Description: 4 folders

1960-1986 Box 32

Physical Description: 6 folders

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Subject Files Series, 1952-1991 and undated

Physical Description: 5 boxes

Scope and Contents note

Contains miscellaneous materials on a variety of individual subjects related to Schmidt-Nielsen. The bulk of material consists of funding inquiries, grant applications, and reports pertaining to different organizations. The series also contains material about scholarly societies and their activities, interspersed with correspondence. A small section includes documents on animal experiments. Folders are labeled by subject and arranged alphabetically within subjects.

American Physiological Society (APS), 1956,
1962-1987 Box 32

Physical Description: 13 folders

American Society of Zoologists (ASZ),
1961-1991 Box 32

Physical Description: folder 1 of 6

American Society of Zoologists (ASZ),
1961-1991 Box 33

Physical Description: folders 2-6 of 6

Animal experimentation, 1980-1987 Box 33

Physical Description: 7 folders

Antarctica, 1972-1974 Box 33

Physical Description: 4 folders

Australia camel research, 1979-1983 Box 33

Physical Description: 5 folders

Grant applications, 1969-1987 Physical Description: folders 1-10 of 24	Box 33
Grant applications, 1969-1987 Physical Description: folders 11-24 of 24	Box 34
International communication, 1980-1987 Physical Description: 10 folders	Box 34
James Jones NIH grant, 1977-1978, 1985 Physical Description: 3 folders	Box 34
National Geographic Society, 1969-1971, 1976-1980 Physical Description: 10 folders	Box 34
NIH grants, 1962-1970 Physical Description: 8 folders	Box 34
NIH grants, 1952-1987, and undated Physical Description: 8 folders	Box 35
NSF grant, 1958-1966, 1977-1981 Physical Description: 6 folders	Box 35
Nixon Library, 1980-1981 Physical Description: 10 folders	Box 35
Old grants, 1953-1969 Physical Description: 16 folders	Box 36
Other grants, 1961-1984 Physical Description: 7 folders	Box 36
Travel, 1960-1962 Physical Description: 2 folders	Box 36

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Translations Series, 1961-1991

Physical Description: 4 boxes

Scope and Contents note

Addition 2001-0075 houses about 50 published translations of Schmidt-Nielsen's textbooks. Titles include *Animal Physiology; Scaling: Why Is Animal Size So Important;* and *How Animals Work*. Languages include Japanese, Polish, Russian, German, Greek, Spanish, French, German, Italian, Hindi, Malay, Norwegian, Hebrew, Swedish, and Portuguese.

19 books, 2 folders	Box 38
10 books, 2 folders	Box 39
3 books	Box 40
17 books	Box 41
11 books	Box 42

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Audiovisual Materials Series, 1967-1969

Physical Description: 1 box

Scope and Contents note

Houses three sound recordings on 7" reel-to-reel tape, of Schmidt-Nielsen giving lectures at two conferences: the Symposium on Comparative Animal Physiology, Washington, January 1967 (title is "The Unusual Animal, or to Expect the Unexpected"); and the Kleiber Symposium held in Davis, California in August 1969 (two reels). Other individuals named on the containers are A. C. Black and Dr. Shannon.

Access Restrictions:

[Originals closed to use. Technical Services staff must arrange to have use copies made. Please contact Research Services staff before coming to use the collection.]

OR1. 1967 Jan., Symposium on Comparative Pharmacology	Box 37
OR2. 1969 Aug., Kleiber Symposium, reel one	Box 37
OR3. 1969 Aug., Kleiber Symposium, reel two	Box 37

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