

ZONING CHANGE REVIEW SHEET

CASE NUMBER: C14H-2009-0087

HLC DATE:

September 28, 2009

PC DATE:

November 10, 2009

APPLICANTS: Ricardo and Thea Wood, owners

HISTORIC NAME: Roger Williams House

WATERSHED: Shoal Creek

ADDRESS OF PROPOSED ZONING CHANGE: 1604 Gaston Avenue

ZONING FROM: SF-3 to SF-3-H

SUMMARY STAFF RECOMMENDATION: Staff recommends the proposed zoning change from family residence (SF-3) district to family residence – Historic Landmark (SF-3-H) combining district zoning.

HISTORIC LANDMARK COMMISSION ACTION: Recommended the proposed zoning change from family residence (SF-3) district to family residence – Historic Landmark (SF-3-H) combining district zoning. Vote: 4-0 (Limbacher ill).

PLANNING COMMISSION ACTION: Recommended the proposed zoning change from family residence (SF-3) district to family residence – Historic Landmark (SF-3-H) combining district zoning. Vote: 8-0.

DEPARTMENT COMMENTS: The house is beyond the bounds of the Comprehensive Cultural Resources Survey (1984).

CITY COUNCIL DATE: December 10, 2009

ACTION:

ORDINANCE READINGS: 1ST 2ND 3RD

ORDINANCE NUMBER:

CASE MANAGER: Steve Sadowsky

PHONE: 974-6454

NEIGHBORHOOD ORGANIZATION: Pemberton Heights Neighborhood Association

BASIS FOR RECOMMENDATION:

The ca. 1950 house is an excellent example of late Colonial Revival architecture with its symmetrical façade, side-gabled configuration, flat-roofed portico, and carved segmental-arched fanlight above the front door. The house is associated with Dr. Roger J. Williams, a world-famous bio-chemist and nutritionist who discovered Vitamin B-6 as well as folic acid, and advocated the study of nutrition and individual bio-chemistry to develop methods of treatment for disorders such as alcoholism and mental illness.

Architecture:

Two-story rectangular-plan side-gabled Colonial Revival-styled brick house with a symmetrical façade, featuring one window on each side of the central entry and a window above the entry. The entry consists of a segmental-arched door surround with a fanlight carving and sidelights. At the door is a flat-roofed portico on paired Doric columns and flat, fluted Doric pilasters. The house has 1:1 fenestration, a composition shingle roof, an exterior brick chimney on the right side of the house piercing the apex of the side gable, and wood siding in the tympanum of each gable. The house is

Historical Associations:

Roger J. and Hazel Williams purchased this property in 1950 and contracted with B.L. McGee for the construction of the house. Roger J. Williams was born in India in 1893, but brought back to the United States by his missionary parents at the age of 2. He grew up in Kansas and California, and graduated from the University of Redlands in California in 1914. He obtained his M.S. and Ph.D. in chemistry from the University of Chicago in 1919, and began work as a research chemist for the Fleischmann Yeast Company in Chicago to learn how yeast cells grow. The next year, he accepted his first teaching position, at the University of Oregon, where he became a full professor of chemistry in 1929. He and Hazel are shown in the 1930 U.S. Census report for Eugene, Lane County, Oregon with their son, 11-year old Roger J. Williams, Jr. The census report shows that Roger J. Williams had been born in India; his father had been born in Illinois and his mother had been born in New York. He was then 36 years old. Hazel Williams had been born in California and was then 38 years old. Their son had been born in Illinois, which would have been at the time that Williams was earning his Ph.D. at the University of Chicago. Williams moved from the University of Oregon to Oregon State College in 1932, and came to the University of Texas in 1939. He established the Clayton Foundation Biochemical Institute at the University of Texas in 1940, which discovered more vitamins and their variants than any other laboratory in the world under his leadership until 1963. While teaching in Oregon, he discovered pantothenic acid, (Vitamin B-6), a growth-promoting vitamin, and made its synthesis possible. His brother, Robert R. Williams, was also a noted biochemist, and isolated Vitamin B-1. While at UT, Dr. Williams discovered, concentrated, and named folic acid, an anti-anemia vitamin. He wrote many biochemistry textbooks, including Introduction to Organic Chemistry (1927).

As his career progressed, Dr. Williams became increasingly interested in the individuality of humans, and urged that science look at humans as individuals with similar, but not identical chemical compositions. He began delving more into the science of nutrition, and the scientific study of alcoholism, mental illness, and other disorders, which revolutionized methods of treatment. His 26 books and 275 scientific articles deal with aspects of human chemistry and understanding how individual chemistry and nutrition affect a person's well-being. He advocated more liberal arts classes for science students to integrate moral principles into the study of science. He was active in the labs at UT until his mid-80s, and was actively writing at the time of his death at 94 in 1988. His first wife, Hazel, had passed away in 1952; his second wife, Phyllis, continued to live in this house until her death in 2004. An interesting footnote in the history of this house is that Roger and Phyllis Williams rented the house to Price and Jean Daniel in 1963 – Price Daniel was a 3-time governor of Texas (1956-62) and had just lost the election for his 4th

term when he returned to the practice of law in Austin and his old home town of Liberty, Texas. He and his wife Jean rented this house from Roger and Phyllis Williams in 1963, at the same time that Williams ended his tenure as the director of the Biochemical Institute at UT.

The current owners, Ricardo and Thea Wood, purchased the house in 2005. Ricardo Wood, who grew up in Houston and Corpus Christi, is a real estate developer in South Texas; Thea Wood, a Michigan native, managed an entertainment magazine in Washington before moving to Austin, and has worked in the high tech media industry and as a luxury market realtor.

PARCEL NO.: 01170207120000

LEGAL DESCRIPTION: The East 40 feet of Lot 4 and the West 50 feet of Lot 5, Block 29, Pemberton Heights Section 10.

ANNUAL TAX ABATEMENT: \$10,038 (owner-occupied); city portion: \$2,000 (capped).

APPRAISED VALUE: \$813,486

PRESENT USE: Single-family residence.

CONDITION: Excellent

PRESENT OWNERS:
Ricardo and Thea Wood
1604 Gaston Avenue
Austin, Texas 78703

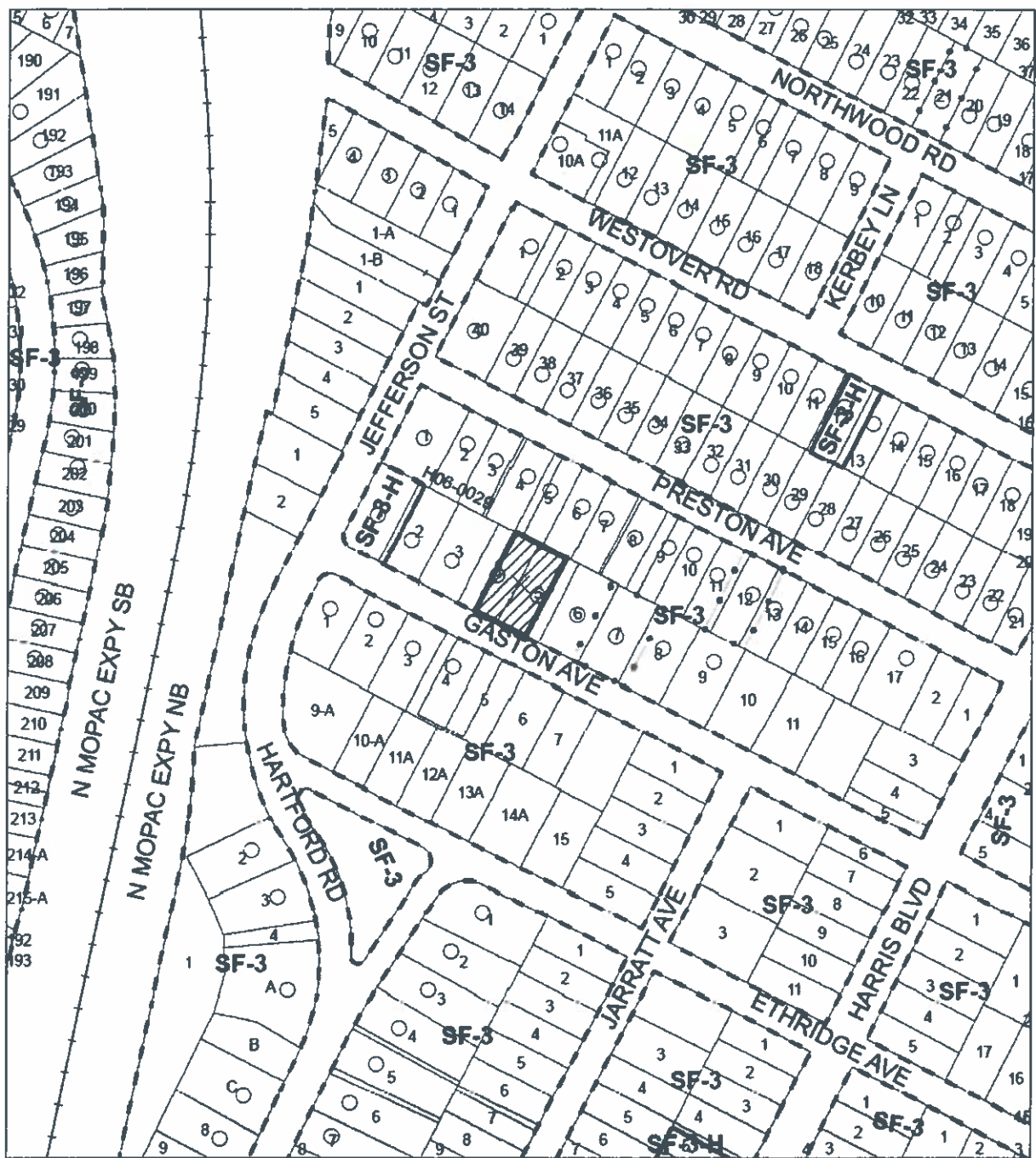
DATE BUILT: ca. 1950

ALTERATIONS/ADDITIONS: A media room and screened porch were added in 2005.

ORIGINAL OWNER(S): Roger J. and Hazel Williams (1950)

OTHER HISTORICAL DESIGNATIONS: None.

LOCATION MAP



1" = 200'

- SUBJECT TRACT
- ZONING BOUNDARY
- PENDING CASE

OPERATOR: S. MEEKS

HISTORIC ZONING

ZONING CASE#: C14H-2009-0087
 ADDRESS: 1604 GASTON AVE
 SUBJECT AREA: 0.000 ACRES
 GRID: H25
 MANAGER: S. SADOWSKY



This map has been produced by G.I.S. Services for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

1604 Gaston Avenue
ca. 1950



OCCUPANCY HISTORY

1604 Gaston Avenue

City Directory Research, Austin History Center
By City Historic Preservation Office
September, 2009

1992	Phyllis Williams, owner Retired
1987	Roger J. and M. Phyllis Williams, owners Retired
1983	Roger J. and M. Phyllis Williams, owners Resident scientist, University of Texas
1979	Roger J. and M. Phyllis Williams, owners Research chemist, University of Texas
1975	Roger J. and M. Phyllis Williams, owners Retired
1971	Roger J. and M. Phyllis Williams, owners Professor, University of Texas
1967	Roger J. and M. Phyllis Williams, owners Professor, University of Texas
1963	Price and Jean B. Daniel, renters Lawyer, 810-11 Brown Building Also listed is Price Daniel, Jr., a student NOTE: Roger and Phyllis Williams are not listed in the directory.
1959	Roger J. and M. Phyllis Williams, owners Professor and Director, Biochemical Institute, University of Texas
1955	Roger J. and M. Phyllis Williams, owners Professor and Director, Biochemical Institute, University of Texas
1952	Roger J. and Hazel Williams, owners Professor, University of Texas
1949	The address is not listed in the directory. NOTE: Roger J. and Hazel Williams are listed as living at 303 Moore Boulevard; his occupation was listed as professor at the University of Texas. Roger and Hazel Williams had lived on Moore Boulevard since around 1941; in the 1940 directory, they are listed as living at 204 W. 33 rd Street. Williams is not listed in earlier directories, having moved to Austin to teach at the University of Texas in 1939.

Dr. Roger J. Williams 1604 Gaston Avenue
 161 E. 40' of 4 & W. 50' of 5 29 - -
 Pemberton Heights #10
 Brick veneer residence with gar. attach.
 46036 8-24-50 \$33,000.00
 B. L. McGee

12

Building permit to Dr. Roger J. Williams - 1950. The contractor listed is B.L. McGee.

Copy 13
Ring 30
6.7.50

WATER SERVICE PERMIT

Austin, Texas

C No. 7188

Received of DR. R. J. WILLIAMS Date 9-15-50

Address 1604 GASTON Avenue

Amount FORTY & NO/100 40.00

Plumber BASEY Size of Tap 1 1/2"

Date of Connection 9-15-50

Size of Tap Made 1 1/2"

Size Service Made 1 1/2"

Size Main Tapped 6"

From Front Prop. Line to Curb Cock 8'

From F Prop. Line to Curb Cock 37'

Location of Meter FRONT

Type of Box LOCK

Depth of Main in St. 3'

Depth of Service Line 2'

From Curb Cock to Tap on Main 31'

Engr. Dept. OCT 13 1950 BI

No. Fittings	Size
1 Curb Cock 1/2"	1/2"
1 Elbow 1/2" SPIT-SLEEVE	1/2"
1 St. Elbow 1/2" COPPER	1/2"
1 Bushing	
1 Reducer	
3 1/2" Pipe 1/2" COPPER	1/2"
1 Lead Comp.	
1 Nipples 1/2" CLOSE	1/2"
1 Union	
1 Plug	
1 Tee	
1 Stop	
1 Box 10" x 6"	
1 Lid	
1 Valves 1/2"	1/2"
Job No. <u>4323-502</u>	
Per. No. <u>761711D</u>	

INDEXED

Water service permit to Dr. R.J. Williams - 1950

A. APPLICATION FOR HISTORIC ZONING

OK to go
SS
7-28-09

PROJECT INFORMATION:

10320542

DEPARTMENTAL USE ONLY	
APPLICATION DATE: <u>7/31/09</u>	FILE NUMBER(S): <u>C14H-2009-0031</u>
TENTATIVE HLC DATE: _____	
TENTATIVE PC or ZAP DATE: _____	
TENTATIVE CC DATE: _____	CITY INITIATED: YES / NO
CASE MANAGER: <u>Steve G.</u>	ROLLBACK: YES/NO
APPLICATION ACCEPTED BY: <u>Carol</u>	

BASIC PROJECT DATA:

1. OWNER'S NAME:	<u>Therese Richard Wood</u>
2. PROJECT NAME:	<u>The Roger Williams House</u>
3. PROJECT STREET ADDRESS (or Range):	<u>1604 Gaston Avenue</u>
ZIP	<u>78703</u> COUNTY: <u>TRAVIS</u>
IF PROJECT ADDRESS CANNOT BE DEFINED ABOVE:	
LOCATED _____	FRONTAGE FEET ALONG THE N. S. E. W. (CIRCLE ONE) SIDE OF
APPROXIMATELY _____	(ROAD NAME PROPERTY FRONTS ONTO), WHICH IS
INTERSECTION WITH _____	DISTANCE FROM ITS CROSS STREET.

AREA TO BE REZONED:

4. ACRES _____	(OR)	SQ.FT. _____
5. ZONING AND LAND USE INFORMATION:		
EXISTING ZONING	EXISTING USE	TRACT# (IF MORE THAN 1)
<u>SF-3</u>	<u>Residence</u>	_____
_____	_____	_____
ACRES / SQ. FT.	PROPOSED USE	PROPOSED ZONING
_____	<u>Residence</u>	<u>SF-3-H</u>
_____	_____	_____

RELATED CURRENT CASES:

6. ACTIVE ZONING CASE? (YES / NO)	FILE NUMBER: _____
7. RESTRICTIVE COVENANT? (YES / NO)	FILE NUMBER: _____
8. SUBDIVISION? (YES / NO)	FILE NUMBER: _____
9. SITE PLAN? (YES / NO)	FILE NUMBER: _____

Revised February 15, 2005

Windsor Rd
#25

Urban

D. SUBMITTAL VERIFICATION AND INSPECTION AUTHORIZATION

SUBMITTAL VERIFICATION

My signature attests to the fact that the attached application package is complete and accurate to the best of my knowledge. I understand that proper City staff review of this application is dependent upon the accuracy of the information provided and that any inaccurate or inadequate information provided by me/my firm/etc., may delay the proper review of this application.

PLEASE TYPE OR PRINT NAME BELOW SIGNATURE AND
INDICATE FIRM REPRESENTED, IF APPLICABLE.

Suzanne Deaderick 7-29-09
Signature Date
Suzanne Deaderick
Name (Typed or Printed)

Firm (If applicable)

INSPECTION AUTHORIZATION

As owner or authorized agent, my signature authorizes staff to visit and inspect the property for which this application is being submitted.

PLEASE TYPE OR PRINT NAME BELOW SIGNATURE AND
INDICATE FIRM REPRESENTED, IF APPLICABLE.

Ther Wood 7-30-09
Signature Date
Ther Wood
Name (Typed or Printed)

Firm (If applicable)

E. ACKNOWLEDGMENT FORM

concerning
Subdivision Plat Notes, Deed Restrictions,
Restrictive Covenants
and / or
Zoning Conditional Overlays

I, Suzanne Deaderick have checked for subdivision plat notes, deed restrictions,
(Print name of applicant)

restrictive covenants and/or zoning conditional overlays prohibiting certain uses and/or requiring certain development restrictions i.e. height, access, screening etc. on this property, located at

1604 Gaston Avenue
(Address or Legal Description)
Austin, Tx. 78703

If a conflict should result with the request I am submitting to the City of Austin due to subdivision plat notes, deed restrictions, restrictive covenants and/or zoning conditional overlays it will be my responsibility to resolve it. I also acknowledge that I understand the implications of use and/or development restrictions that are a result of a subdivision plat notes, deed restrictions, restrictive covenants and/or zoning conditional overlays.

I understand that if requested, I must provide copies of any and all subdivision plat notes, deed restrictions, restrictive covenants and/or zoning conditional overlay information which may apply to this property.

S Deaderick
(Applicant's signature)

7-29-09
(Date)

TAX CERTIFICATE
Nelda Wells Spears
Travis County Tax Assessor-Collector
P.O. Box 1748
Austin, Texas 78767
(512) 854-9473

NO 1041362

ACCOUNT NUMBER: 01-1702-0712-0000

PROPERTY OWNER:

WOOD RICHARD L
1604 GASTON AVE
AUSTIN, TX 78703-2421

PROPERTY DESCRIPTION:

E 40 FT OF LOT 4 * & W 50 FT LOT 5
BLK 29 PEMBERTON HEIGHTS SEC 10

ACRES 0.000 MIN% .00000 TYPE

SITUS INFORMATION: 1604 GASTON AVE

This is to certify that after a careful check of tax records of this office, the following taxes, delinquent taxes, penalties and interests are due on the described property of the following tax unit(s):

YEAR	ENTITY	TOTAL
2008	AUSTIN ISD	*ALL PAID*
	CITY OF AUSTIN (TRAV)	*ALL PAID*
	TRAVIS COUNTY	*ALL PAID*
	TRAVIS COUNTY HEALTHCARE DISTRICT	*ALL PAID*
	ACC (TRAVIS)	*ALL PAID*

TOTAL SEQUENCE 0

ALL PAID

TOTAL TAX:
UNPAID FEES:
INTEREST ON FEES:
COMMISSION:
TOTAL DUE ==>

ALL PAID
* NONE *
* NONE *
* NONE *
ALL PAID

TAXES PAID FOR YEAR 2008 \$14,854.09

ALL TAXES PAID IN FULL PRIOR TO AND INCLUDING THE YEAR 2008 EXCEPT FOR UNPAID YEARS LISTED ABOVE.

The above described property may be subject to special valuation based on its use, and additional rollback taxes may become due. (Section 23.55, State Property Tax Code). Pursuant to Section 31.08 of the State Property Tax Code, there is a fee of \$10.00 for all Tax Certificates.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS DATE OF 07/09/2009

Fee Paid: \$10.00

Nelda Wells Spears
Tax Assessor-Collector

By: 

**The Roger Williams House
1604 Gaston Avenue**

Historical Documentation/Deed Chronology

<u>Transaction/Date</u>	<u>Volume/Page</u>
Barnes and Mary Lathrop to Roger J. & Hazel Williams January 12, 1950	1015/239
Roger J. Williams to Mabel Phyllis Williams February 6, 1956	1655/455
Estate of Mabel Phyllis Williams to John W. Hobson June 29, 2004	
John W. Hobson to Richard L. Wood June 20, 2005	

**Chronological Listing of Owners/Occupants
1604 Gaston Avenue**

Year	Occupant Name	Source
1950-88	Roger J. Williams	City Directory
1989-2004	Mrs. Roger J. Williams	City Directory
2004-05	John Hobson	City Directory
2005-present	Richard & Thea Wood	City Directory

Biography of Dr. Roger J. Williams

Roger J. Williams was an internationally known biochemist and nutritional scientist who spent most of his career as a teacher and researcher at the University of Texas.

Williams was born in Ootacumund, India to missionary parents on August 14, 1893. His formal education culminated in a Ph.D. (*magna cum laude*) from the University of Chicago in 1919. He taught at the University of Oregon, Oregon State and the University of Texas. From 1934 until his retirement in 1971, he was a professor of chemistry at U.T. After joining U.T., he founded the Biochemical Institute in 1940, with a grant from the Clayton Foundation of Houston. While directing the Institute from 1940 to 1963, Dr. Williams and his colleagues discovered more new vitamins and their variants than any other research group in the world.

While studying the nutrition of yeast cells, he discovered, isolated and made possible the synthesis of *pantothenic acid*, a universal B-vitamin needed by every cell in the human body. For this discovery, he received the Mead Johnson Award of the American Institute of Nutrition and the Chandler Medal of Columbia University along with his brother, Dr. Robert R. Williams, who isolated vitamin B-1. It was the first time since the award was established in 1910 that it was shared by two persons.

Later, he concentrated *folic acid* for the first time and gave it its name.

In 1972, Dr. Williams was named the first honorary president of the International Academy of Preventive Medicine, and he served on an 18 member national panel appointed by then President Richard Nixon to study heart disease.

The author of many textbooks on organic chemistry and biochemistry, Dr. Williams wrote 26 books and almost 300 scientific articles. Many of his books were printed in paperback for mass sales, and many were translated into foreign languages, including Russian and Japanese.

Dr. Williams was a member of the American Chemical Society, National Academy of Sciences, the American Society of Biological Chemists, the Association for Cancer Research, the Society of Experimental Biology, the Biochemical Society of London, Phi Beta Kappa and Sigma Xi, and a fellow of the American Association for the Advancement of Science.

Biography of Phyllis Williams

A Chicago widow who was an industrial credit manager in that city, Phyllis Hobson crossed Williams' path in 1953 following the tragic death of his first wife. Phyllis was sent to Houston to attend a credit management conference by her employers. She was seated in an airport limousine next to a "sourpuss Texan" she believed to be a farmer or rancher because of his deep suntan. He asked for her business card, and shortly thereafter, mailed her a copy of one of his erudite articles. Her sourpuss Texas rancher had turned into a scientist-professor with a golfing tan.

Biography of Ricardo Wood & Thea Wood

Ricardo and Thea Wood purchased the Roger Williams House in 2005 from Mrs. Williams' son after she passed away. They restored the home and moved in the summer of 2006 with their daughter, Lucy. Their son, Jarrett, came along in 2007.

Ricardo was born in Houston, spent his teen years in Corpus Christi and moved to Austin in 1985 to attend UT. He now develops commercial real estate in south Texas and owns a local vending company named Lucky Vending.

Thea Wood was raised in metropolitan Detroit, attended Ohio Wesleyan University and lived in Washington D.C. for seven years, where she received her MBA from George Mason University. In D. C., she managed a local entertainment magazine and later worked for America Online. She moved to Austin in 1998 and has since worked in high-tech media and (since 2003) luxury real estate with Diane Dopson Properties.

REPORTER AT LARGE

UT's Williams Explores
Writes on New Science

By LORRAINE BARNES

Dr. Roger J. Williams, as you probably know, is being hailed as the father of a brand new science—chemical anthropology. His brilliantly expounded hypothesis that no man is precisely like any other man—because of biochemical differences that are the bedrock of our individuality—has kicked up all kinds of excitement among the scientific disciplines, and has made this philosopher-in-scientist who directs the University of Texas Biochemical Institute one of the vivid names in a challenging area of research.

Dr. Williams is also president of the American Chemical Society and the author of a new book, "Biochemical Individuality," published last December. When the Saturday Review published a condensation of a chapter from this book last month, the magazine sized up the author's importance by using his picture (with Dr. Alfred Taylor, research scientist in the UT Biochemical Institute) as its cover piece. Together with Williams' article, Saturday Review printed the critically admiring comments of two other prominent scientists, Dr. Henry A. Barton, director of the American Institute of Physics, and Dr. Alan Gregg, vice president (retired) of the Rockefeller Foundation.

Dr. Williams is not only a foe of the concept of human conformity but an articulate one. When he writes, almost anybody can understand what he's saying. What does he mean when he says we're all different, each person in his own way, but have a heck of a time knowing how we are different? Dr. Williams must have seized with special pleasure on a quotation from novelist Ivan Turgenev which he uses at the start of his chapter, "Chemistry Makes the Man."

"A man's capable of understanding anything," Turgenev wrote, "how the ether vibrates and what's going on in the sun—but how many other men can blow his nose differently from him."

With Dr. Williams' liking for a witty phrase in mind, we don't think the eminent scientists will mind if we tell this:

So that he could leave on a lecture tour, Dr. Williams' seminar class at the University doubled its hours to complete a semester's work before April 21. Dr. Williams was thus able to get away Easter Sunday for engagements that will

keep him in the state capital until May 17.

His seminar class was concerned with "Biochemical and Physiological Bases of Human Behavior." Well, that's a longish title and what does it mean anyhow? His students just called it Dr. Williams' "People Are Funny Class."

5-3-57
A. H. C.

ROGER J. WILLIAMS

Roger J. Williams was born in Ootacamund, India, of missionary parents August 14, 1893. His formal education culminated in a Ph.D. degree (magna cum laude) from the University of Chicago in 1919. He has taught at the University of Oregon, Oregon State, and, since 1940, at The University of Texas.

While studying the nutrition of yeast cells he discovered, isolated and made possible the synthesis of pantothenic acid, a universal B-vitamin needed by every cell in the human body. Later he concentrated folic acid, an anti-anemia vitamin, for the first time and gave it its name.

At The University of Texas he was Director of the Clayton Foundation Biochemical Institute from 1940 to 1963 when he formally "retired." More vitamins and their variants have been discovered in this laboratory than in any laboratory in the world.

Two of his outstanding books at retirement were THE HUMAN FRONTIER (Harcourt Brace 1946), and BIOCHEMICAL INDIVIDUALITY (John Wiley & Sons 1956; sixth printing UT Press, 1977). The latter book has been translated into Russian, Italian and Polish.

Following Professor Williams' formal retirement he concentrated on human nutrition as his central field of interest. His books, ALCOHOLISM: THE NUTRITIONAL APPROACH (Univ. of Texas Press, fifth pb printing, 1978) NUTRITION IN A NUTSHELL (Doubleday, Dolphin) and NUTRITION AGAINST DISEASE (Pitman, Bantam Books) have been widely read. Since his 80th birthday he has continued to be actively involved, writing and editing several important books dealing with aspects of human nutrition, including PHYSICIANS HANDBOOK OF NUTRITIONAL SCIENCE (C.C. Thomas) and THE WONDERFUL WORLD WITHIN YOU (Bantam Books).

Professor Williams is a member of the National Academy of Sciences, was President of the American Chemical Society in 1957, has received honorary D.Sc. degrees from Columbia, Oregon State University and University of Redlands, his Alma Mater. In 1941, for his discovery of pantothenic acid, he received the Mead Johnson Award of the American Institute of Nutrition and the Chandler Medal of Columbia University. In 1972 he served as a member of the President's Advisory Panel on Heart Disease. He is listed in WHO'S WHO IN AMERICA, WHO'S WHO INTERNATIONAL (London), and Webster's BIOGRAPHICAL DICTIONARY.

Biochemical Institute Chief Outstanding US Researcher

One of the nation's outstanding research scientists had been given the use of a new grant of \$4,500 given by the United Fund of Austin for cancer research at the University of Texas.

Dr. Roger J. Williams, director of the University of Texas Biochemical Institute, who for the past 10 years has made a study of alcoholism and was several days ago told of the findings in that field at the meeting of the National Academy of Sciences in New York City.

Dr. Williams 10 years ago began the study with the hypothesis that "a psychological stressor can make an individual an alcoholic unless he has inherited a pattern which renders him susceptible." Since then, thousands of tests have been made of metabolic patterns in both alcoholics and control groups, and the hypothesis still stands, a report of the New York speech by the scientist stated.

The grant of \$4,500 was the second made this year by the United Fund to bring its total assistance to \$4,500.

Dr. Williams, in cooperation with his associate, Dr. Alfred Taylor, University of Texas scientist, in February 1938, announced a new method of cancer control after more than 10 years of constant research involving many thousands of experiments in the University of Texas laboratories. The two scientists said then they were able to control with substantial success the growth of a mouse mammary cancer when cultivated in embryonated eggs. As a result of their study, they suggested that cancer control may involve the simultaneous use of suitable drugs along with certain physical agents, such as temperature increase.

His research in cancer and alcoholism brought to Dr. Williams in January 1938 his installation as president of the American Chemical Society, the world's largest professional association of scientists and engineers.

Dr. Williams has had an interesting career. He was born in Ootacamund, India, in 1893, the son of missionary parents. He graduated from the University of Redlands in 1914, and received master of science and doctor of philosophy degrees from the University of Chicago. He holds honorary doctor of science degrees from Redlands and Columbia.

After a year as a research



DR. ROGER J. WILLIAMS

chemist with the Flieschmann Company in Chicago, Dr. Williams began his teaching career in 1920 as an assistant professor of chemistry at the University of Oregon. He was made an associate professor in 1929 and was a full professor there from 1929 to 1932. He served on the Oregon State College faculty before joining the staff of the University of Texas in 1933.

Dr. Williams had been director of the Biochemical Institute at the University of Texas since 1940 and consulting biochemist at M. D. Anderson Hospital in Houston since 1942. He serves on the Food and Nutrition Board and the National Research Council and was formerly with the United States Public Health Service.

He has received the Mead Johnson Award of the American Institute of Nutrition and the Chandler Medal of Columbia University, which he shared in 1942 with his brother, Dr. Robert R. Williams, assistant to the president of the Research Corporation, New York.

A member of the American Chemical Society since 1919, Dr. Williams also is a member of the National Academy of Sciences, the American Society of Biological Chemists, the Association for Cancer Research, the Society of Experimental Biology, the Biochemical Society of London, Phi Beta Kappa and Sigma Xi. He is a fellow of the American Association for the Advancement of Science.

WILLIAM J. WEEG

The Austin American

11.22.57

Roger Williams, at 93, Champions the Liberal Arts

by Teo Furtado

Dr. Roger Williams became famous for his work in nutrition, but over the last several years he has been more concerned with education, individuality, and "things unseen" than with proteins and vitamins.

"Our educational system has paid far too much attention to material things and far too little to things of the mind, things like love and hope and a sense of decency," says the retired UT professor. "Ideas, aspirations, poetry, conscience, and the love of beauty are all facts and are just as real as bones, flesh, and enzymes."

Author of more than 20 books and 275 articles, Williams, a biochemist, gained international recognition for discovering and making possible the synthesis of pantothenic acid, a B-vitamin that is one of the 14 vitamins essential to life, and for naming and pioneering the study of folic acid, an anti-anemia vitamin. Along with his friend, Nobel Laureate Linus Pauling, Williams has been one of the people most responsible for legitimizing the science of nutrition.

The late Dr. David Miller, a UT professor emeritus of philosophy, once said: "Williams' influence covers practically the entire world, where malnutrition is considered a major problem among the rich and poor alike. No research in pure science has found its way so rapidly and widely into applied science and actual practice as have Williams' discoveries." His books have been translated into most major languages, including Russian, Polish, Italian, and Japanese.

At 93, Williams' body doesn't respond the way he wants it to anymore. He can't see the words his hands labor to write, and he has trouble hearing a manuscript read aloud to him. But his mind still sparkles with the precision that made him one of the best-known biochemists in the world.

"I didn't encounter the simple idea of the secular importance of the unseen until I thought it out for myself at the age of 84," he says. "As you can see, I was no spring chicken."

In his latest book, *Rethinking Education—The Coming Age of Enlighten-*



Dr. Roger Williams, a world-known biochemist.

Nutritionist turns his energies to feeding the mind.

ment, which he began working on three days before his 87th birthday. Williams advocates a return to the liberal arts as a way of integrating moral principles with science and learning. "Scientists and educators tend to deemphasize *Gedankenstoffe*—things of the mind," he says. "People in the sciences have to take more liberal arts courses if they're to learn that human values are an integral part of education. It's a lesson that science must learn."

Williams became interested in nutrition through his research as a graduate student at the University of Chicago. His discovery of and subsequent work with pantothenic acid convinced him that well-nourished cells can improve behavior and increase sharpness of mind—an opinion that has been confirmed in tests the world over.

At the age of 27, Williams was informed that he had an ulcer. Like most other patients at the time, he was given morphine as a sedative after the operation. But the morphine kept him awake throughout the night, causing his mind to flit uncontrollably from subject to subject. When the doctor noticed that he hadn't slept, he increased Williams' morphine dosage. "You can't imagine what it was like for me," he says. "I nearly lost my mind." That episode led Williams to question the models of physical similarities given in most medical texts. Intensive investigation suggested to him that each person is peculiarly individuated—so much so, he says, that every organ or tissue is like a personal fingerprint: it can belong to only one person. He is working on a book, tentatively called *Recognizing and Appreciating Individuality is a Vital Key to Human Understanding*, which encapsulates his ideas on individualism and human development.

"We have to understand individual people if we are to have any insurance against an atomic holocaust," he says. "With our technology, we understand how nuclear weapons work; but our lack of unified education leaves our understanding of human beings fragmented and incomplete."

Williams came to the University in 1939 and founded the Clayton Foundation Biochemical Institute in 1940. While he was director, scientists at the Institute discovered more vitamins and vitamin variants than any other laboratory in the world.

Some scholars think that Williams' contribution to education may turn out to be as important as his work on nutrition. "It is hard to understand how we will address the next hundred years, but if we address them intelligently, we must address them in an integrative way, and I think you have shown us the way more completely than anyone up to this time," wrote Texas A&M president Frank E. Vandiver to Williams after reading the book. (J)

cheese. Williams' assistant, Margo Bieseke, interviewed at the Faculty Center, stuck to a buffet salad selection. Both insist on taking vitamin supplements.)

On the subject of research: *A scientist who has done research for many years, who consults with other scientists constantly on current research, who observes and studies every day, does develop theories and opinions which he firmly believes to be true but which still need to be proved. It is his function to attempt to prod researchers and physicians into delving into these theories and to make use of them.*

Although the Nobel Prize, which he never mentions but which admirers believe is due him, has eluded him so far, Williams has gathered a garland of honors. In 1941, following his discovery of pantothenic acid, he was awarded both the Mead Johnson Award of the American Institute of Nutrition and the Chandler Medal of Columbia University. He is a member of the National Academy of Sciences, has received honorary doctorates from Columbia, Oregon State University, and the University of Redlands, where he received his B.S.

He was the first biochemist to be elected president of the American Chemical Society (1957) and was also its first president from south of the Mason-Dixon Line. In London (1971), he became a Founding Fellow of the Academy of Orthomolecular Psychiatry.

In 1972, he was named the first honorary president of the International Academy of Preventive Medicine, and he served on an 18-member national panel appointed by then President Richard Nixon to study heart disease.

Most important, his almost-300 scientific articles and his books are widely read. Many of the latter have been printed in paperback for mass sales, and many have been translated into foreign languages, including Russian and Japanese.

The personal life of the scientist-scholar seems to be one of the happiest visible in the UT-Austin community. He and second wife Phyllis live in a handsome traditional house on one of Austin's most elite streets, surrounded by art objects gathered from many trips abroad. Living nearby are such long-time friends as Cleon and Philip Creer, former dean of the UT School of Architecture, who most appreciate

Williams' wit. "It's so dry and so subtle that if you don't watch out, it gets right by you!" chuckles Creer.

"I am interested in nutrition for real people. Many other nutritionists are interested in nutrition for hypothetical people."

—Roger J. Williams

The effusive Phyllis' influence on Williams' life is considered monumental by all who know them. A Chicago widow who was an industrial credit manager in that city, she crossed Williams' path in 1953, following the tragic death of his first wife. Sent to Houston to attend a credit management conference by her

employers, Phyllis was seated in an airport limousine next to a "sourpuss Texan" she believed to be a farmer or rancher because of his deep suntan. He asked for her business card, and, shortly thereafter, mailed her a copy of one of his erudite articles. Her sourpuss Texas rancher had turned into a scientist-professor with a golfing tan.

Today, it is difficult to imagine one without the other. When they meet, they touch. When she speaks, he smiles. Her influence is said to be evident in his immaculate Hong Kong suits and well-chosen bow ties. While he devotes himself to research and writing, she is, he says, "the floor manager, business manager, inspirer, news reporter, and prime literary critic." Of course, one gathers, she would be pleased if he appreciated her cooking a bit more.

Roger Williams in his study at home with his wife Phyllis.



Dr. Roger J. Williams, professor emeritus of chemistry at the University of Texas, was honored in 1972 by being named the first honorary president of the International Academy of Preventive Medicine.

Dr. Williams, a research scientist and former director of the Clayton Foundation Biochemical Institute, has long been a spokesman for preventive medicine and nutrition.

Because of his work in nutrition and its relation to heart disease, Dr. Williams was appointed by President Richard Nixon to an 18-member panel to "determine why heart disease is so prevalent and so menacing and what can be done about it."

The 1972 honors top a long list of achievements by Dr. Williams since he joined The University of Texas in 1939, after beginning his career as research chemist for Fleischmann Company in Chicago. While at Fleischmann he got his first "lead" on the B-vitamin pantothenic acid, one of the 14 acids essential to life.

After joining the University, he founded the Biochemical Institute in 1940, with a grant from the Clayton Foundation of Houston. While directing the Institute from 1940 to 1963, Dr. Williams and his colleagues discovered more new vitamins and their variants than any other research group in the world.

Dr. Williams discovered and synthesized pantothenic acid and has pioneered in research on the effects of diet and the B-vitamins on alcoholism, cancer and mental disease. His work has also contributed to the understanding and treatment of alcoholism.

(more)

2--UT--Dr. Roger J. Williams

The prominent nutritionist received a bachelor's degree from the University of Redlands, Calif., and master's and Ph.D. degrees from the University of Chicago. He also has received honorary Doctor of Science degrees from the University of Redlands (1934), Columbia University (1942) and Oregon State College (1956).

He is a member of the National Academy of Sciences, past president of the American Chemical Society (the first biochemist to hold that post) and he has received the Mead Johnson Award of the American Institute of Nutrition.

Dr. Williams is the author of many textbooks on organic chemistry and biochemistry. He also has written more than 200 scientific articles.

The publications include "The Human Frontier," "Free and Unequal," "Biochemical Individuality" (since publication, it has been translated into Russian, Italian and Polish), "Nutrition in a Nutshell," "You are Extraordinary" and "Nutrition Against Disease."

###

1973

Is the food you eat the key to the way you experience life?

Yes, says a world-famous biochemist, whose nutritional approach to health is explained in a new book, *The Wonderful World Within You.* / By Paula Rice Jackson



Editor's Note: Roger J. Williams, Ph.D., D. Sc., is 84 years old. He walks 3 miles a day to and from lunch and to his home from his office at The University of Texas in Austin where he is Director Emeritus of the Clayton Foundation Biochemical Institute with which he has been associated for 38 years. Dr. Williams is the discoverer of pantothenic acid, a member of the

vitamin B group, and did pioneer work with the synthesis of folic acid to which he gave its name. He is the author of some 20 books on the subjects of biochemistry, nutrition and the importance of individuality and variation in every human being. He is a member of the editorial board of *Executive Health*, a medical newsletter read by thousands of laymen and professionals across the country. Dr. Williams is also the first biochemist to be elected president of the American Chemical Society. His new book, *The Wonderful World Within You, Your Inner Nutritional Environment*, was published last June in an original paperback edition by Bantam Books.

It was one of the more popular catch phrases of the 60s. "You are what you eat." It has taken, however, the consciousness-raising 70s to bring home the importance of nutrition to millions of Americans. Dr. Roger Williams became one of the pioneers of the study of nutrition as a result of his experiments with yeast cultures, determining the nutrients which would make yeast thrive, not just grow and reproduce, but thrive.

"I look upon nutrition as a universal thing that we as humans participate in. Animals, plants, fish, birds, microorganisms, and everything cellular in them requires nutrition. Since the things that are essential for their nutrition are also essential for ours, their nutrition becomes ours when we eat the tissues of plants and animals. I first began studying fundamental nutrition and its effect on different life forms when I was studying yeast. Now, yeast will grow in almost any sugar-bearing mixture, but in order to make it thrive, it has to have certain nutrients, some known, some unknown, but the point is that nutrients can be varied to produce good and bad effects on growing things. I maintain that the quality of human experience, the uniquely human ability to reason, to produce art and poetry, to appreciate music or beauty, the presence of an inner life, is affected by

the quality of nutrition we take into ourselves. My book stresses biochemical individuality. It underscores the fact that each and every one of us has important and different biochemical needs. For example, certain aspects of the metabolizing process may go on in one person at a rate ten times faster than in another. If I were to give you a total rundown of everything I ate and everything I did, you'd have some information about me, but you wouldn't have much in the way of advice or information for anyone else. Extra vitamins and minerals have different effects on different people. People's nutritional needs can vary as much as 500 percent for one chemical and much less for others."

“The quality of human experience, the uniquely human ability to reason, to produce art and poetry, to appreciate music or beauty, the presence of an inner life, is affected by the quality of nutrition we take into ourselves.”

Q: What is the connecting link if we are each so different?

A: "Vitamins, minerals, trace minerals, and amino acids are the parts of the metabolic machinery. If any one is lacking, the whole process stops. It's very hard to say which vitamins, or which major or trace minerals do what to benefit the body. It's like taking a watch apart. You find a tiny wheel and you ask, is this what runs the watch? Of course not, it's that wheel combined with all the other necessary mechanisms that run the watch. The forty basic chemicals which team up to make metabolism work are essential for the growth, repair, well-being, and reproduction of our bodies' cells. We need a better understanding and appreciation of how these assortments of chemicals keep our bodies and minds healthy."

Q: How has your research changed your own eating habits?

A: "I've found that as time goes on it is very important to reduce the amount of sugar I eat. I'm not one who spends a

great deal of time considering and recording everything I've eaten, but it seems to me that you can hardly find a plain doughnut these days! If you were to go into a field where sugar cane is growing and chew on a stalk of it you would get much better nutrition than you would get by eating sugar out of a sugar bowl. I prefer to eat whole grain products wherever possible. My wife and I enjoy fish and we have it frequently, though I couldn't tell you exactly how often. I regard cheese as a healthful food, but that doesn't mean that I eat it all the time. Much of people's nutrition is a social thing. If you don't know anything about nutrition and if none of your friends are particularly concerned about it either, then, when foods are purchased, nutritional considerations are overlooked. But if we can make everyone aware of the importance of high-quality nutrition, then every food purchase becomes an informed one."

Continued on page 26



ABOUT THAT APPLE A DAY

"Bartlett's Familiar Quotations says it's an American expression from the 1800s. Though there is no such thing as a perfect food, by that we mean a food that has the total percentage of the forty growth and maintenance chemicals we require, the egg probably comes closest to it. The apple, as it turns out, is better nourishment than we supposed before we collected our data; It does contain almost every vitamin, major and trace mineral, and amino acid the body needs, though not in the best proportions. No one food does that, hence again the necessity for a wide variety throughout the day. When the "apple a day" phrase was coined, they couldn't have known anything about the essential nutrients the apple contained. It's a tribute to folk wisdom, or body wisdom, that our more precise, modern knowledge tells us that apples are a very wholesome food."

Nutrition

UNIVERSAL, CRITICAL, ALWAYS IMPROVABLE

Roger J. Williams, Ph.D., D.Sc.

My first excursion into the field of nutrition was in 1918 when I was awarded a fellowship at the University of Chicago to study yeast nutrition. It was already known that yeast would grow in a limited way when introduced into a sugar solution containing minerals and ammonium salts. I soon found that in such a medium yeast will not grow from single cells, for to grow such cells a more complex medium is necessary.

The Chicago experience proved to be fortunate, for it led to the discovery of pantothenic acid, its concentration, determination of structure, and synthesis. Pantothenic acid, which all living cells need, must be obtained through nutrition or endogenous metabolism. The recognition of pantothenic acid's universality was an important step in realizing that all living cells have many common ingredients in their metabolic machinery.

Recently on a family picnic I chanced to observe the precarious conditions surrounding the lichens growing on the rocks. Some rocks were well spotted with relatively healthy growths; others supported only a few, small, thin films of growth. These lichens constitute a symbiosis between fungi and algae whereby the algae carry on photosynthesis, and the fungi carry on other activities (perhaps vitamin building) in which the algae may be deficient.

Reflecting that green plants and fungi (in fact, most other organisms) have about the same mineral needs, I realized that the lichens had to get these elements from the rocks (or from dust in the air). Obviously some rocks furnished a much better nutritional environment than others. If any one of the rocks had been lacking, zinc, for example, no growth would have taken place. It would be necessary to make a microanalysis of the various rocks to be in a position to improve the environment of any rock by supplying adequate amounts of deficient minerals.

Having been reared in a region where corn is grown, I have looked at corn fields with interest in many parts of the world. Some fields are producing almost no corn, only a little fodder. Sometimes, under more favorable conditions, they may yield 15 or 25 bushels to the acre. If the soil contains a good assortment of all the essential nutrients and is well aerated, and water is abundant and the weather hot, the yield may be near the maximum. How-

ever, the yield never reaches an absolute apex, although it could be artificially augmented by increasing the carbon dioxide content of the air or by adjusting some other factor.

We have carried out extensive experiments to ascertain whether the nutrition furnished a growing embryo can be improved by introducing specific nutrients into incubating eggs. Feeding extra vitamins to laying hens can in some cases markedly improve the hatchability of eggs, and injecting nutrients into incubating eggs may, under appropriate circumstances, improve the nutrition received by the developing embryo.

Weanling rats have been used extensively in nutritional studies. The quality of their diet is reflected by their growth. If the diet is poor, the growth will be poor, if the diet is excellent, the growth will be correspondingly excellent. When attempts were made to study the growth of baby chicks with a poor or mediocre diet, the baby chicks promptly died.

It was not until pantothenic acid and other essential vitamins were discovered that meaningful nutritional experiments with baby chicks could be done. At the initiation of such experiments, baby chicks are embryologically 21 days old, one half as old as the 21 day old weanling rats used in nutritional experiments. This difference in embryonic age is important. After years of study we now know that the nutritional needs of a weanling rat, for best development, are about 95 percent the same as the needs of a baby chick. The suckling period of 21 days is critical for a baby rat. After this they can remain alive on mediocre diets, even though they will be more or less stunted.

There is no place in nature that I know of among single-celled organisms, insects, fowls, or mammals where nutrition is not crucial for well-being and where nutrition cannot be improved by appropriate means. It is clear to me that at the human level nutrition is often mediocre or worse and that it, too, can always be improved.

This improvement can take place at any stage of life—during prenatal development, babyhood, childhood, adolescence, middle or old age. It seems obvious, although not adequately demonstrated, that every improvement we can make in human nutrition will be accompanied by improved health and vigor.

Biochemist Roger J. Williams has done extensive research on the B vitamins, nutrition and alcoholism, and genotrophic diseases. He has been a strong advocate of nutrition courses in medical

schools and has written books for the general public, such as Nutrition in a Nutshell and The Wonderful World Within You, as well as several technical works on biochemistry and more than 200 articles.

Monday, November 5, 1979

Nobel winner Linus Pauling to laud Williams

Dr. Linus Pauling, twice a Nobel Prize laureate and director of the Linus Pauling Institute in Menlo Park, Calif., will give a free public lecture here today in honor of Dr. Roger Williams' 40th anniversary at the University of Texas.

Pauling's address will be at 7:30 p.m. in the Lyndon B. Johnson Auditorium on the UT campus. His talk, entitled "New Developments in Nutrition," will focus on the use of vitamin C in the treatment of cancer, the subject of his latest book soon to be published.

Co-sponsors of the lecture are the UT Clayton Foundation Biochemical Institute, of which Williams was founder and director, and the Foundation for Nutritional Advancement in Washington, of which Pauling and Williams are founders and board members.

Pauling won the Nobel Prize in Chemistry in 1954 and received the Nobel Peace Prize in 1962. After World War II, Pauling became a leader in peace movements, especially in the campaign for nuclear disarmament and the hazards of nuclear weapons testing.

Pauling and Williams have been friends for 40 years.

Williams — From B1

diets, Williams was saying that is not necessary.

"Cholesterol," he wrote in his book "Nutrition Against Disease," "is an absolute essential for our bodies all through life." Eliminating cholesterol entirely from the diet, he said, "is like throwing the baby out with the bath water."

Instead, he said, "good nutrition, if it is really good, prevents cholesterol deposits from forming, even when our cholesterol consumption is moderately high." And Williams said there are other chemicals produced by the body that can counteract the effect of the cholesterol.

To this day, many doctors across the country still advise patients to eliminate cholesterol from their diets. But, Williams said, his views on cholesterol are no longer "unorthodox."

"The best medical people have come around to my way of thinking," he said.

Doctors, Williams repeatedly grumbles, are sorely neglecting nutrition. Some are paying more attention to it, but not nearly enough, he said.

"The medical people are the experts in health and knowing what's wrong with people. If nutrition means nothing to them, why should it to anyone else?"

"I don't feel I'm an enemy of medical professionals. I'm all for 'em. But I'm for 'em getting educated," he said.

Williams' work has increased as he has aged, thanks to his own nutrition and exercise, he said.

When he was 70, Williams became increasingly distressed by angina, a problem caused by blood being drawn away from the heart, depriving the heart of necessary oxygen and nutrition. He began to take even more seriously the material he was writing about heart disease and "began doing things for myself I had not done before." One re-

sult of his personal nutrition scheme was an improvement in his walking and his ability to walk farther.

Just before he took those measures, Williams said he was "ready to quit — sign off." Now, at 86, he's working more vigorously than he ever expected he would 10 years ago.

His work, however, is made more difficult because he's nearly blind. Williams' former secretary reads to him in the mornings. After he gets to his office, he writes in longhand, then turns over his script to Margo Biesle, his secretary.

"I can write, but I can't read what I write," Williams said. Exactly how poor is his vision? "Well," he told a reporter sitting a foot away from him, "I can see you have dark hair, and a blue blouse and a scarf." Then, he moved his chair two feet away and said, "You're a blur."

How does he walk the 2½ miles home and across the UT campus for lunch at the Varsity Club? "I can see large objects," he said.

Returning to his lifelong interest in nutrition, Williams admitted there are some "food faddists" who take a little bit of knowledge about nutrition and carry it to the extreme. But, he said, "there are a lot worse things in life than food faddists, including doctors who ignore nutrition and a government that subsidizes tobacco."

"There are people, like Adele Davis (the late health food promoter), who visited me here a few years ago. She made a deep bow, bragged on me a bit and acted like she knew the answers, answers I didn't know and she didn't know either."

"We don't have all the answers. That's what I want, is more people, more money being spent on this kind of research. In this country, there are tens of thousands of people doing research on matters related to medicine, but how many (are doing research) on nutrition related to health?"



THE AWARD FOR NUTRITION
of the
ARTHUR M. SACKLER FOUNDATION
for the
ARTS, SCIENCES AND THE HUMANITIES

HONORS

Roger J. Williams

*Pioneer Biochemist and Nutritionist,
whose insights into biochemical individuality enrich all humanity
as his discoveries illuminate understanding
of the cell and of all organisms
including Homo Sapiens
in Health, in Aging and in Disease*

Pioneer researcher, humanist and teacher,

Roger J. Williams

stands in the history of 20th century biology as an exemplar of the great scientist, the biochemist and nutritionist who assured better health for the 21st century.

Roger J. Williams first discovered and synthesized pantothenic acid. He and The Biochemical Institute he created contributed to the discovery and isolation of many of the other vitamins in the B complex. He was among the first to recognize and systematically exploit the fundamental principle of a universal relationship in the biochemical requirements of all living organisms. He laid the basis for quantitative microbial analytic methods with profound effects on the course and development of cellular science. He advanced our knowledge of nutrients in health, in relation to aging, psychic disorders, alcoholism and mental retardation as well as in a wide spectrum of disease.

Biochemical individuality in homo sapiens is uniquely a Roger J. Williams' advocacy. From the biochemical isolation of individual nutrients he proceeded to demonstrate the uniqueness of each individual. The philosophy of biochemical individuality will, in the ages ahead, enrich the health and outlook of all humanity.

For his distinctive achievements as a scientist and for his humanity we will always be grateful.



OBITUARIES

Roger J. Williams Is Dead at 94; Biochemist and Nutrition Expert

By GLENN FOWLER

Roger J. Williams, an internationally known biochemist and nutritional scientist who discovered the growth-promoting vitamin pantothenic acid, died of pneumonia Saturday at the Four Seasons Nursing Home in Austin, Tex. He was 94 years old and a long-time resident of Austin.

Dr. Williams spent most of his career as a teacher and researcher at the University of Texas, where he was professor of chemistry from 1934 until his retirement in 1971 and where he directed the Clayton Foundation Biochemical Institute until three years ago.

The author of 26 books and more than 275 scholarly articles, he remained active until his death, revising his latest work, which is to be published this year. Two days before his death, an associate recalled yesterday, Dr. Williams asked to have galley proofs brought to the nursing home this week so that he could check them.

He was a lifelong investigator whose curiosity took him along many avenues. He was credited with making significant advances in knowledge of the way nutrients effect health, aging, psychological disorders, alcoholism and mental retardation, among other diseases.

New Book at 92

In the last two decades Dr. Williams was deeply concerned with education, in particular with what he considered the neglect by medical schools in teaching nutritional science. In 1986, at the age of 92, he published "Rethinking Education: The Coming Age of Enlightenment."

Dr. Williams was born to missionary parents in the Ootacamund in the state of Madras, India, on Oct. 14, 1893. He graduated from the University of Redlands in California in 1914 and received master's and doctoral degrees from the University of Chicago.

It was while he was at Chicago that he did his initial work on pantothenic acid. Not until 15 years later, at a meeting of the American Chemical Society, was he able to announce its discovery, and not until 1940 was it identified as a member of the important family of vitamins known collectively as the B complex.

With his Ph.D in chemistry in hand, Dr. Williams went to work as a research chemist for the Fleischmann Corporation, the yeast producer, now a subsidiary of RJR Nabisco Inc. In 1920 he joined the faculty of the University of Oregon, continuing his research, and in 1932 he moved to Oregon State University, remaining there until he became professor of chemistry at Texas in 1934.

As the guiding spirit of the Biochemical Institute since 1940, Dr. Williams presided over the discovery of more vitamins and their variants than were found at any other laboratory in the

world. It was there that he did pioneering work in the discovery of folic acid, an important agent in combating pernicious anemia and another member of the B complex.

In 1941 he and his older brother, Dr. Robert R. Williams, then chemical director of the Bell Telephone Laboratories and the scientist who isolated Vitamin B-1, were awarded the Charles Frederick Chandler Medal by Columbia University for their research in biochemistry. It was the first time since the award was established in 1910 that it was shared by two persons. Robert Williams died in 1965.

Dr. Williams was the chosen in 1957 as president of the American Chemical Society, the first biochemist to head the organization. At the time, its 75,000 members made it the largest scientific group in the world.

His first book, "Introduction to Organic Chemistry," published in 1928, was an instant success and within a year was used as a text by more than 300 colleges. Among his other books were "Nutrition and Alcoholism" (1951), "Free and Unequal" (1953), "Biochemical Individuality" (1956), "Nutrition Against Disease" (1971) and "Physicians' Handbook of Nutritional Science" (1975).

Survivors include his wife, the former Phyllis Hobson; two sons, Roger J. Jr. of Orangeburg, N.Y., and Arnold E. of Boulder, Colo.; a daughter, Janet Wilcox of Coeur d'Alene, Idaho; a stepson, John Hobson of Farmington, Conn., nine grandchildren and 10 great-grandchildren.

UT nutritionist Williams dies at 94

Professor recognized worldwide as expert

By Joe Vargo
American-Statesman Staff

Roger J. Williams, a University of Texas professor who was recognized as one of the world's foremost authorities on nutrition in a career that spanned 70 years, died over the weekend at the age of 94.

Williams' work in nutrition at the UT Clayton Foundation Biochemical Institute — which he founded — led to the discovery of more vitamins and their variants there than at any other research facility in the world.

He was particularly interested in the role nutrition played in physical and mental well-being. Until he retired in 1986, Williams worked regularly in his laboratory on the UT campus.



A colleague says Roger Williams' work 'will continue to be used for many centuries.'

Williams was a proponent of "biochemical individuality," a concept that no two people are exactly

alike physiologically and therefore everyone has different nutritional requirements. A book he wrote on the subject in 1956 still is in print, something of a milestone because most scientific journals usually go out of print within a decade, colleagues said.

Williams died late Saturday of pneumonia in an Austin nursing home. He had been in ill health for months, but still kept in touch with scientists at UT — many of whom he persuaded to come to Austin.

Services are pending.

"He had a very fertile mind and always had new and forward thinking ideas," said Dr. William Shive, a UT biochemistry professor who knew Williams since 1944. "We will miss him, but what he said will continue to be used for many centuries to come."

Among the ideas he espoused late in his life was a basic education

See Williams, A5

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Williams

From A1

curriculum for all countries of the world, Shive said.

The son of Baptist missionaries, Williams was born August 14, 1893, in Ootacamund, India. He received his doctorate in 1919 from the University of Chicago.

The author of several textbooks on chemistry and biochemistry, Williams taught at the University of Oregon and Oregon State University before coming to UT in 1939.

Among Williams' most significant accomplishments was the discovery and isolation of pantothenic acid, one of the "universal vitamins" required by all living cells and essential to life. Later he discovered and named folic acid, a substance used by every cell in the body.

In 1940, thanks to the generosity of Houston philanthropist Benjamin Clayton, Williams turned a \$15,000 grant into the Clayton Foundation Biochemical Institute. Work at the institute added significantly to the knowledge of the role nutrition plays in health, aging, psychological disorders, alcoholism, mental retardation and many diseases.

Williams also was interested in how certain vitamin deficiencies could cause health problems. Williams believed one affliction, carpal tunnel syndrome which is characterized by pain and tingling in the wrist, was caused by a deficiency in vitamins B-6 and riboflavin.

Williams also researched how a person's diet affected his health, but he was quick to point out that what was good for one person might not necessarily prove beneficial to another.

"He was an inspiration to a very large number of people," said Dr. Donald R. Davis, director of the Clayton Foundation. "I think I represent a generation of scientists and medical people who have been influenced by his ideas about nutrition."

Davis said that unlike many scientists, who confine their interest "to what can be seen," Williams believed in the importance of intangibles.

"He has long made the point

that there are other things, like hope and love, that are just as important to the state of human affairs as to what can be seen," Davis said.

Williams was the author of 26 books and more than 275 scholarly articles. His last book, *Exploring Your Individuality: A Vital Step Toward Human Understanding*, is scheduled to be published later this year. His books have been translated into Russian, Italian and Polish.

Survivors include his wife, Phyllis Williams; three sons, a daughter, nine grandchildren and 10 great-grandchildren. Arrangements are being handled by Weed-Corley Funeral Home.



Roger J. Williams

Roger J. Williams, regarded nationally and internationally as one of the pioneering giants of nutritional science, died on February 20, 1988, at the age of 94, after a long and distinguished career as a research biochemist and educator.

Born in Ootacamund, India, of

Monday, February 22, 1988

Austin American-Statesman

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American missionary parents, he was, however, educated in the U.S., culminating in a Ph.D. degree in Chemistry from the University of Chicago in 1919. Except for a brief time of employment in industry with the Fleischmann Company in Chicago, Professor Williams focused his attention on research and teaching, first at the University of Oregon, then Oregon State University, and from 1939 until his final retirement in 1986, at The University of Texas at Austin. In 1940 he founded the Clayton Foundation Biochemical Institute at the University, and served as its Director until 1963, during which time more vitamins and their variants were discovered in this laboratory than in any other laboratory in the world.

Perhaps Professor Williams' greatest scientific contribution was his discovery, isolation and synthesis of pantothenic acid, which required 23 years of concentrated research to bring to fulfillment. However, his pioneering work with folic acid (another vitamin which he named) is also of great importance, as are his concepts

of biochemical individuality and genotrophic disease.

Hundreds of university students and the general public have benefited greatly from his teaching and his 22 books and over 275 articles.

His first book, *An Introduction to Organic Chemistry*, was published in 1927 and was used in over 300 colleges and universities the first year it was in print. His most recent book, *Rethinking Education: The Coming Age of Enlightenment*, was published when he was 92 years old. Yet another book, with coauthors, is entitled *Exploring Your Individuality: A Vital Step Toward Human Understanding*, and is being published this year.

Roger J. Williams received many awards and honors including three honorary D.Sc. degrees, election to the prestigious National Academy of Sciences, and the Chandler Medal from Columbia University. He was the first biochemist ever to become President of the American Chemical Society (1957), the largest scientific organiza-

tion in the world.

He is survived by his wife, M. Phyllis Williams; three sons, Roger J. Williams, Jr., of Orangesburg, New York, Arnold E. Williams of Boulder, Colorado, and John Hobson of Farmington, Connecticut; a daughter, Janet Williams Wilcox of Coeur d'Alene, Idaho; nine grandchildren and ten great-grandchildren.

Funeral services are pending at Weed-Corley Funeral Home.

In lieu of flowers, the family requests that those so desiring may wish to make a memorial contribution to the Roger J. Williams Nutrition Institute for Disease Prevention Education and Research, c/o the International Academy of Nutrition and Preventive Medicine, P.O. Box 5832, Lincoln, Nebraska 68503, or to the Foundation for Nutrition Advancement, 800 New Hampshire Avenue N.W., Washington, D.C. 20037.

Arrangements by Wood-Corley Funeral Home, 3125 N. Lamar, 482-5811.

AAS. 02/22/1988

IN MEMORIAM

ROGER J. WILLIAMS

Roger J. Williams, professor emeritus of chemistry, died on February 20, 1988. He was 94.

Professor Williams was born on August 14, 1893, in Ootacumund, India, of missionary parents. He received a bachelor's degree from the University of Redlands in 1914, and master's and PhD degrees from the University of Chicago in 1918 and 1919, respectively.

Dr. Williams worked as a research chemist and taught at the University of Oregon and Oregon State College. He joined the faculty of The University of Texas at Austin in 1939. Dr. Williams founded the Clayton Foundation Biochemical Institute and served as its director from 1941 to 1963. Under his direction, more vitamin discoveries were made at the institute than at any other laboratory in the world. Institute discoveries included three forms of vitamin B6, synthesis of vitamin B12, and lipoic acid.

Professor Williams made major professional contributions to his field. He discovered the B vitamin and pantothenic acid. He also concentrated and named folic acid. His research resulted in 22 books and nearly 300 articles. Two of his outstanding publications were *The Human Frontier* and *Biochemical Individuality: The Basis for the Genetotropic Concept*. Later he published the widely read *Nutrition in a Nutshell* and *Nutrition Against Disease: Environmental Prevention*.

Professor Williams was president of the American Chemical Society in 1957 and held membership in the National Academy of Sciences. He received the Mead Johnson Award from the American Institute of Nutrition and the Chandler Medal from Columbia University for his discovery of pantothenic acid.

<signed>

John R. Durbin, Secretary
The General Faculty

Biographical sketch prepared by Teresa Palomo Acosta and posted on the Faculty Council web site on December 20, 2000. Additional biographical sources can be found in Barker Texas History Center, the UT Office of Public Affairs, the **Department of Chemistry and Biochemistry** web site, and the **New Handbook of Texas**, Texas State Historical Association, 1996.

WILLIAMS, ROGER JOHN (1893-1988). Roger John Williams, biochemist, nutrition researcher, teacher, and writer, was born on August 14, 1893, one of six children of Robert Runnels and Alice Evelyn (Mills) Williams, American Baptist missionaries working in Ootacumund, India. His oldest brother, Robert R. Williams, is noted for the isolation and synthesis of thiamin (vitamin B1). Williams was brought to the United States at age two and grew up in Kansas and California. He earned a B.S. from the University of Redlands in 1914 and a high school teacher's certificate from the University of California at Berkeley in 1915. He then taught for two years. He married Hazel Elizabeth Wood in 1916. The couple raised three children. He received an M.S. in 1918 and a Ph.D. in chemistry in 1919 at the University of Chicago. The goal of his doctoral research and a subsequent year with the Fleischmann Company was to learn what makes yeast cells grow. His work led to over twenty years of biochemical research with yeast, primarily at the University of Oregon and Oregon State College, and culminated in the discovery, characterization, and synthesis of pantothenic acid, a vitamin found in all living cells. During this time he also published four textbooks on organic chemistry and biochemistry.

In 1939 Williams moved to Austin and became a professor of chemistry at the University of Texas. The next year he received the support of Benjamin Clayton of Houston to found the Clayton Foundation Biochemical Institute at the university; he was its director until 1963. During that time this laboratory discovered more vitamins and their variants than any other. Work on folic acid (which he named), pyridoxal and pyridoxamine (vitamin B6), and lipoic acid grew out of his pioneering use of microorganisms in vitamin research. The laboratory provided considerable funds for the university when it patented processes for producing pantothenic acid and vitamin B12.

Williams's honors include the Mead-Johnson Award (American Institute of Nutrition, 1941); the Chandler Medal (Columbia University, 1942); election to the National Academy of Sciences (1946); presidency of the American Chemical Society (1957; he was the first Southerner elected to this post); honorary D.Sc. degrees from the University of Redlands (1934), Columbia University (1942), and Oregon State College (1956); the Nutrition Award of the Arthur M. Sackler Foundation for the Arts, Sciences, and Humanities (1983); and commendation from the Texas Senate (1984).

Following Williams's work on pantothenic acid, his research interests broadened to include studies of individuality, which he considered his most important contribution. He stressed that inborn differences between humans are extensive, significant, and crucial to understanding and solving most human problems. He addressed these ideas in several books—*The Human Frontier* (1946), *Free and Unequal* (1953), *Biochemical Individuality* (1956), *You Are Extraordinary* (1967), and *Rethinking Education: The Coming Age of Enlightenment* (1986). He also became a leading advocate of advancing nutritional science in medicine and preventive medicine, as addressed in *What To Do About Vitamins* (1945), *Alcoholism: The Nutritional Approach* (1959), *Nutrition in a Nutshell* (1962), *Nutrition Against Disease: Environmental Prevention* (1971), *Physicians' Handbook of Nutritional Science* (1975), *The Wonderful World Within You* (1977), and *The Prevention of Alcoholism Through Nutrition* (1981). He also published 275 scientific articles.

Hazel Williams died in 1952, and Williams married Mabel Phyllis Hobson the next year. Williams was a Methodist. He was an avid golfer, walker, and fan of University of Texas athletics, and he held season football seats until his mid-eighties. Declining vigor and weakening eyesight prompted his reluctant retirement at age ninety-two. He continued to write until just

days before he died of pneumonia in an Austin nursing home on February 20, 1988. He was buried in Austin Memorial Park. His papers are in the University of Texas Archives.

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Donald R. Davis