

SMUCR-M(T2)

4 October 1963

Dr. Richard B. Stoughton
 Section of Dermatology
 Lakeside Hospital
 Cleveland 6, Ohio

Dear Dr. Stoughton:

Thank you for your letter of 19 September 1963.

Your estimate of capacity for in vitro studies with 15 or 20 different compounds should fulfill our needs. I agree that in vivo work should be done with fewer compounds. It is desirable to have data on at least two chemically dissimilar compounds but the proving of a method rather than comparisons of compounds should be the object of in vivo studies.

You indicate that use of a physiological indicator will be easier than measurement of C^{14} in urine or blood. Do you anticipate any reason why one of the nicotines of low volatility will not serve this purpose, if obtained with C^{14} ?

You will recall that during my last visit I asked that you consider use of skin temperature measurements or infrared photography as a physiological indicator. I mentioned having heard of equipment used to photograph inflamed areas for detection of cancer but at that time was unable to say where such equipment existed. After reading an article on the Barnes infrared thermograph (Saturday Evening Post, September 28, 1963, p. 44), I conclude that this apparatus was being described in the reference seen earlier.

The \$25,000 price tag on the thermograph clearly eliminates the possibility of procurement for a contract during the next two years. However, I wonder if Western Reserve has, or will get a thermograph which you could use occasionally. Proving feasibility of detecting penetration by any of a wide variety of irritants would fall within the scope of our expressed need. Such proof could be obtained concurrently with studies utilizing C^{14} nicotines if a thermograph is available.

I again wish to point out that your final report is not due at these laboratories on the date of contract termination, although you may schedule work on the report to end on that date.

Distribution:

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 1 cy: Med Mail & File O
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Sincerely,

Author:

MILLARD M. MERRISON, VMD 4 Oct 63
 Contract Project Officer

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Cont. CML 215

4 Oct 63

MRICD

Edgewood Area Records Holding Area

Edgewood Arsenal, Maryland

Accession # 3-81

Box # 21 of 55

Folder name: 1303-25 Res & Dev Admin RP Files

Correspondence - Western Reserve University

*Bob & Wes
 4 Oct 63*

*File
 4 Oct 63*

WESTERN RESERVE UNIVERSITY
SCHOOL OF MEDICINE

SECTION OF DERMATOLOGY
LAKESIDE HOSPITAL
CLEVELAND 6, OHIO

September 19, 1963

Millard M. Mershon, VMD
Contract Project Officer
U.S. Army Chemical Research and
Development Laboratories
Edgewood Arsenal, Maryland

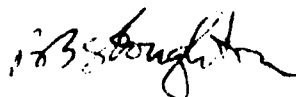
Dear Doctor Mershon:

Thank you for your letter of September 13.

We have already worked with the technique of Dr. Marzulli, which allows us to use much smaller areas of skin to study skin penetration. His technique has worked very well for us. Our supply of skin is really not a problem. We can get more than we need as a rule. It is difficult for me to give you a very exact estimate of how many compounds we would be able to test. If the current techniques of measuring radioactive substances can be utilized, we should not have any major problems to overcome. Therefore, I would expect that we could get in vitro penetration data on 15 or 20 different compounds. In vivo penetration data will be more difficult and there it is difficult for me to estimate how many compounds we might be able to test. Using a physiological indicator, we should not have too much difficulty, but if we are going to have to measure radioactivity in urine or blood, I would anticipate considerable technical difficulty. I think we can test enough different compounds so that you will have some insight into the effects of esterification, molecular alteration and physical properties on the ability of an agent to penetrate.

I am working on the final report and expect to have it to you by the end of November.

Sincerely,



Richard B. Stoughton, M.D.

RBS/jmv

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WESTERN RESERVE UNIVERSITY

CLEVELAND, OHIO 44106

SCHOOL OF MEDICINE

SECTION OF DERMATOLOGY
LAKESIDE HOSPITAL
ADDRESS: 2065 ADELBERT ROAD

TELEPHONE: 791-7300
AREA CODE 216

Ext 2139

January 29, 1965

Millard M. Mershon, VMD
Field Toxicology Branch
Directorate of Medical Research
U.S. Army Edgewood Arsenal
Edgewood Arsenal, Maryland 21010

100 $\mu\text{c}/\text{mg}$

10 $\mu\text{c}/\text{mg}$

Dear Dr. Mershon:

Thank you very much for your letter of January 22. We will look forward to working with the C^{14} nicotines when they arrive. Also, I hope you will be able to formulate a conference next October and that we will be able to take part.

With best regards,

Richard B. Stoughton

Richard B. Stoughton, M.D.

RBS/sk

Call
Phone call on 2 Feb:
Dr Stoughton agreed that he could use
100 microcurie/mg material, and might even
get some data with 10 $\mu\text{c}/\text{mg}$ material. Also
wants C^{14} nicotine acid.
RBS



14 June 1964

Dr. Richard E. Stoughton
 Director of Dermatology
 Western Reserve University
 Cleveland 6, Ohio

Dear Dr. Stoughton:

Apparently our contracting authorities are nearly ready to close out the active aspects of your contract. Accordingly, they will soon be able to negotiate a no-cost extension of the contract, as required to prolong your custody of the government equipment involved.

You will recall our discussions of possible use of C^{14} labeled nicotines to compare penetration values as indicated by erythema with values based on surface counting techniques. As soon as a no-cost extension is confirmed I will be able to order C^{14} nicotines or other appropriate materials. Can you now indicate which compounds, what quantities and specific activities, and what dates of use would fulfill our mutual purposes? If so, I will be able to make necessary preliminary arrangements to meet your needs.

We also hope to arrange another Conference of Contractors for Skin Research in October or November of 1964. To facilitate meaningful discussion we hope to distribute abstracts of scheduled papers prior to the conference. We also plan to receive all manuscripts at the conference so that arrangements for publication can be initiated immediately. Do you have any preferences for specific dates in October or November?

Sincerely,

Author:

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MILLARD M. MERRIN, WMD
 Contract Project Officer

Ch, Fld Tox Br _____ MEChristensen
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 16 June 64

*File
 6/16/64*

*1303-255
 6/16/64*

WESTERN RESERVE UNIVERSITY
SCHOOL OF MEDICINE

SECTION OF DERMATOLOGY
LAKESIDE HOSPITAL
CLEVELAND 6, OHIO

July 16, 1964

Millard M. Mershon, VMD
Contract Project Officer
U.S. Army Chemical Research and Development Laboratories
Edgewood Arsenal, Maryland

Dear Dr. Mershon:

Thank you for your letter of June 16, 1964. I have just returned from vacation, and so the delay in answering. I think it would be worthwhile to compare C¹⁴ ethyl nicotinate with C¹⁴ hexyl or octyl nicotinate. Material with an activity ~~greater~~ than 10 millicuries per mg would be desirable. We could probably work with 100 mg of material or possibly less. We would be ready to use this material at any date.

Sincerely,

RBS Stoughton
Richard B. Stoughton, M.D.

58-2029/1

RBS/aeb

- 1. John C. to order this
 - 2. See that extension written at no cost - 1 year?
Gov't to get reports on work done with gov't furnished material.
- meener

9/14/64
M³

See me about this.

MJ

File
8/19/64

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SECTION OF DERMATOLOGY
LAKESIDE HOSPITAL
ADDRESS: 2065 ADELBERT ROAD

TELEPHONE: 791-7300
AREA CODE 216

August 4, 1964

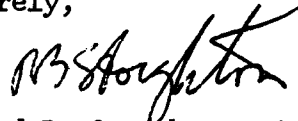
Mr. John Callahan
Field Toxicology Branch
Building 3220
Edgewood Arsenal, Maryland

Dear Mr. Callahan:

I have received a letter from Dr. Mershon in which he has advised me that C^{14} labeled nicotines may be available. I would prefer to have the two nicotines delivered at the same time and they would be utilized in our study at the same time. We have an Atomic Energy Commission number. It is 34-738-1.

I hope this information will be sufficient.
Thank you very much for your kind help.

Sincerely,



Richard B. Stoughton, M.D.

RBS/sk

*130 3-25
W.M. Ken. U.*

*File
8/28 Aug 64*



SMMA-CR-MT

20 October 1964

Dr. Richard B. Stoughton
Director of Dermatology
Western Reserve University
Lakeside Hospital
Cleveland 6, Ohio

Dear Dr. Stoughton:

The last step in clearance procedure on your contract was completed this week. It is now legally possible for our procurement personnel to negotiate with Western Reserve for extended loan of the government property in your possession. In turn, this arrangement will enable us to procure C¹⁴-labeled nicotine if the terms of the extended loan agreement include your commitment to furnish reports of your studies using the equipment and material. In effect this would constitute a contract in which we trade our material for your services. I expect to attend the symposium on cutaneous toxicity in Washington on 26 and 27 October. I will plan to contact you, after you present your paper, to discuss these arrangements so that I can make suitable recommendations to those empowered to negotiate.

Now that I am again able to work on arrangements for a Conference of Contractors for Skin Research for late 1964 or early 1965, I will also be interested in discussing your possible participation in such a conference.

Sincerely,

Author:

MILLARD N. MARSHON, M.D.
Field Toxicology Branch
Directorate of Medical Research

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SMJRA-CR-MT

Dir/Proc

Attn: Mollie Gutman
Contract Admin

Western Reserve University

Contract DA18-108-405-CML-215 (DA18-108-CML-6576(A))

Fld Tox Br

Dir/Med Res

20 October 64

MMershon/bv/24257

1. The following disposition of property involved in the subject contract is hereby recommended, in response to your request of 14 October 1964 for disposition instructions.
2. It is requested that title to government furnished property be retained pending negotiations for an extended loan arrangement with Western Reserve University for the period of one year.
3. Preliminary discussion with the principal investigator has disclosed his willingness to conduct studies with C¹⁴-labeled nicotines involving use of the government property. He will perform these studies without cost to the government if furnished with the nicotines. It is in the best interest of the government to have these studies completed.
4. Dr. Stoughton, the Western Reserve principal investigator, will present a paper at a symposium in Washington on 26 October. I plan to confirm the above intentions on his part at that meeting. It is my expectation that he will furnish informal quarterly progress reports to the contract project officer, and manuscripts or reprints of ensuing publications in scientific journals, contingent an extended loan agreement and delivery of about \$900 worth of C¹⁴-labeled nicotines.
5. On or about 28 October I will plan to submit a specific request for negotiation of an extended loan arrangement, based on results of discussion with Dr. Stoughton.

Author:

MILLARD M. MERSHON, VMD
Contract Project Officer

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20 Oct 64

J.C.
10/20/64

SMUEA-CR-MT

Western Reserve University
 Contract DA18-108-405-CML-215 (DA18-108-CML-6576(A))

Dir/Proc
 Attn: Mollie Gutman
 Cont Admin

CPO

25 November 64
 MMershon/bv/24257

1. The following disposition of property involved in the subject contract is recommended, per your request of 14 October 1964.

2. It is requested that an extended loan agreement be negotiated with Western Reserve University. This agreement should call for these laboratories to furnish 100 mg of ethyl nicotinate with C^{14} activity of 10 millicuries per mg. A similar specimen of either C^{14} -labeled hexyl nicotinate or C^{14} -labeled octyl nicotinate may also be furnished. In return for such material and use of government property the contractor should furnish reports as indicated below. The former principal investigator and custodian of the equipment under the subject contract, Dr. Richard B. Stoughton, has indicated willingness to negotiate an agreement with such provisions.

3. It is recommended that the agreement be negotiated to provide for a contractual term of one year from the date of arrival of the C^{14} -labeled compounds at the contractor's facility.

4. It is recommended that the contractor be required to furnish one final report within 90 days after completion of the specified period of one year. Provisions and distribution of this report should be similar to those specified for the final contract report of the subject contract.

5. Informal quarterly letter reports of progress should be required. Three copies of each such report should be delivered to Dr. M. M. Mershon, Field Toxicology Branch, Bldg 3220, Edgewood Arsenal, Maryland. These reports should be delivered on or before those of the following dates which fall within the last 10 months of the agreement: 15 March, 15 June, 15 September and 15 December.

6. The contractor should be required to furnish to these laboratories 10 copies of any published material or unpublished manuscripts on hand 90 days after completion of the specified period of one year, if such material includes information acquired with government-owned equipment or the specified compounds during the period between the dates of expiration of the subject contract and of the agreement period.

7. It is recommended that the loan agreement provide for transfer of all property (furnished under the subject contract) to the contractor as soon as provisions of the specified extended loan agreement are met.

8. The present status of arrangements for procurement of the specified compounds is indicated by Inclosure 1.

Distribution:

Incl 1
 Orig & 1 cy: Fd
 1 cy: Tox Div
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Author:
 MILLARD M. MERSHON, VMD
 Contract Project Officer

File Temp
 Cont 215-cml
 BV/25 Nov 64

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LAKESIDE HOSPITAL
CLEVELAND 6, OHIO

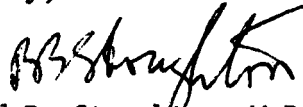
August 4, 1964

Millard Mershon
19 N. Atwood Road
Bel Air, Maryland

Dear Dr. Mershon:

I am sorry to hear that you are incapacitated and particularly to the extent that you might require an operation. I sincerely hope that you will recover rapidly from your present ailment. I will write to Mr. John Callahan with regard to our AEC license number. I think it would be best if both nicotinic acid derivatives were mailed at the same time. I will so inform Mr. John Callahan.

Sincerely,



Richard B. Stoughton, M.D.

RBS/sk

1302.25
1000 Ken. 71.

File
8/19/64

Copy of this to Central Property 12/4/65 → Mr. Robert W. ... May 210

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CLEVELAND, OHIO 44106
SCHOOL OF MEDICINE

SECTION OF DERMATOLOGY
LAKESIDE HOSPITAL
ADDRESS: 2065 ADELBERT ROAD

TELEPHONE: 791-7300
AREA CODE 216

April 8, 1965

Millard M. Mershon, VMD
Field Toxicology Branch
Directorate of Medical Research
U.S. Army Edgewood Arsenal
Edgewood Arsenal, Maryland 21010

Dear Dr. Mershon:

I have received your recent note regarding the receipt forms for the various nicotines. We have received three radioactive nicotines, ethyl nicotine, nicotinic acid and octyl nicotine. I am able to find only one invoice which is in reference to the ethyl nicotine. The other invoices have either been misplaced or did not arrive with the order. I am enclosing the invoice for ethyl nicotine.

Sincerely,

RBS Stoughton

Richard B. Stoughton, M.D.

RBS/sk
Encl.

Copy of letter returned to Dr Stoughton with
enclosure & :

Thanks — no further paperwork
needed to confirm receipt.
MC who

File 22 Apr 65
mm

AN ASSOCIATE IN THE UNIVERSITY CIRCLE



PROGRAM

MRICD
Edgewood Area Records Holding Area
Edgewood Arsenal, Maryland
Accession # 3-81
Box # 21 of 55
Folder name: 1303-25 Res & Dev Admin RP Files
Correspondence - Western Reserve University

1303-25
11/24/65