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WISCONSIN ALUMNI RESEARCH FOUNDATION

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September 1, 1975

Mr. Norman J. Latker
Patent Counsel
Office of the General Counsel
Department of Health, Education,
and Welfare
Washington, D. C. 20201

Dear Mr. Latker:

Re: Institutional Patent Agreement
University of Wisconsin-Department of
Health, Education, and Welfare

This letter and the attachment will comprise the annual report required under the terms and provisions of the above noted agreement for the period from July 1, 1974 through June 30, 1975. Reported are new inventions which have been brought to the Foundation and reported to the Department during the indicated period as well as information regarding inventions for which the Foundation was previously given responsibility under the Institutional Patent Agreement. You will find pertinent information regarding all of these inventions in the attached table.

Very truly yours,

UNIVERSITY OF WISCONSIN

By s/RHL

Reuben H. Lorenz, Vice President and
Controller

WISCONSIN ALUMNI RESEARCH FOUNDATION

By s/HWB

Howard W. Bremer, Patent Counsel

RHL:HWB:rw
Enc.

bc--Mr. Lorenz ✓
Prof. Young
Mr. Gentry
Rosten & Woerpel

UNIVERSITY OF WISCONSIN-WARF
DHEW INSTITUTIONAL AGREEMENT INVENTION REPORT
July 1, 1974-June 30, 1975

<u>Invention & Grant No.</u>	<u>Inventors</u>	<u>Invention Reported to DHEW</u>	<u>Serial No. Filing Date</u>	<u>Development and Commercial Use</u>	<u>WARF Expenditures (Approx. Estimate)</u>
ytokinin Antagonists Plant Growth in ormone IH Grant No. M 12395	Bock, R. M. Hecht, S. M. Skoog, F. K. Schmitz, R. Y.	11/18/71	285,677 9/1/72	Arrangements being made for commercial interest to screen compounds for use in plant science field. Another interest extant in mammalian field.	\$2,600 \$1,500 (apportioned expense)
4,25-Dihydroxy- holecalciferol IH Grant Nos. M 14881 M 15512	DeLuca, H. F.	7/6/72	Pat. No. 3715374 issued 2/6/73	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$1,025 \$4,000 (apportioned expense)
5,26-Dihydroxy- holecalciferol IH Grant No. M05800-08	DeLuca, H. F.	11/16/71	Pat. No. 3739001 issued 6/12/73	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$ 835 \$4,000 (apportioned expense)
,24,25-Trihydroxy- holecalciferol IH Grant Nos. M 14881 M 15512	DeLuca, H. F.	7/17/73	379,621 7/16/73; Pat. No. 3847955 issued 11/12/74	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$3,500 \$4,000 (apportioned expense)

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5, 6-Trans-25-Hydroxycholecalciferol NIH Grant No. AM 15512	DeLuca, H. F. Holick, M. F. Garabedian, M.	2/11/72	Pat. No. 3743661 issued 7/3/73	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$1,500 \$4,000 (apportioned expense)
1, 25-Dihydroxy-ergocalciferol NIH Grant Nos. 5-PO1-AM-14481 5-PO1-AM-15512	DeLuca, H. F. Jones, G. Schnoes, H. K.	6/13/74	472,953 5/24/74; Pat. No. 3880894 issued 4/29/75	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$2,700 \$4,000 (apportioned expense)
Method of Treating Milk Fever in Dairy Cattle with 1 α -Hydroxycholecalciferol NIH Grant Nos. 5-PO1-AM-15512 5-PO1-AM-14881	DeLuca, H. F. Jorgensen, N.	6/13/74	435,099 1/21/74; Pat. No. 3879548 issued 4/22/75	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$1,200 \$4,000 (apportioned expense)
1, 25-Dihydroxycholecalciferol NIH Grant No. AMO 5800-10	DeLuca, H. F. Schnoes, H. K. Holick, M. F.	4/8/71	Pat. No. 3697559 issued 10/10/72	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$6,500 \$4,000 (apportioned expense)

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α -Hydroxycholecalciferol NIH Grant No. AM 15512	DeLuca, H. F. Schnoes, H. K. Holick, M. F. Semmler, E.	12/2/71	Pat. No. 3741996 issued 6/26/73	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent. Several companies show particular interest in this compound.	\$11,500 \$ 4,000 (apportioned expense)
1α -Hydroxyergocalciferol NIH Grant No. AM 14881	DeLuca, H. F. Schnoes, H. K. Lam, H. Y.	8/28/74	479224 6/14/74; Pat. No. 3907843 issued 9/23/75	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$ 2,400 \$ 4,000 (apportioned expense)
3-Deoxy- 1α -Hydroxycholecalciferol NIH Grant No. AM 14881	DeLuca, H. F. Schnoes, H. K. Lam, H. Y.	8/28/74	480,211 6/17/74; Pat. No. 3906014 9/16/75	Licensed to Upjohn Co., Roussel Uclaf (France), Leo (Denmark); other licenses imminent.	\$ 3,200 \$ 4,000 (apportioned expense)

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Electromagnetic Flow-meters for Blood or other Conductive fluids IH Grant No. E-07754	Folts, J. D.	9/29/71	Pat. No. 3739640 issued 6/19/73	No commercial interest found. Probably not licensable because of market size and technological factors.	\$ 1,700
The Preparation and use of Europium and Manganese Chelates of 3-Tri-Fluoracetyl-Camphor and 3-Trifluoro-n-butyl-Camphor Postdoctoral Fellow O-1-GM-41571	Goering, H. L. Eikenberry, J. Koerner, G. S.	9/10/71	Pat. No. 3789060 issued 1/29/74	Licensed to Regis Chemical Co. and Willow Brook Labs. (Compounds being marketed) Pat. No. 3789060 involved in interference proceedings.	\$10,000
Fluorinated Camphor Derivatives and Europium and Manganese Chelates thereof Postdoctoral Fellow O-1-GM-41571	Goering, H. L. Eikenberry, J. Koerner, G. S.	5/23/74	375,614 7/2/73 (Div. of above)		
Isolation of a Ca ⁺⁺ -specific Ionophore from Mitochondria IH Grant Nos. -PO1-GM-12847-09 -PO1-GM-12847-10	Green, D. E. Blondin, G. A.	2/13/75	No pat. app. filed to date	Invention awaiting better definition before pat. app. will be filed and commercial interest contacted.	\$ 250

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Fast Neutron Collimator NIH Grant Nos. 1-RO1-CA-13469-01 5-RO1-CA-13469-02 2-PO1-CA-12099-02	Kelsey, C. A.	2/13/75	No pat. app. to be filed.	DHEW notified of decision not to file pat. app. on 2/13/75	\$ 500
Compensation of Patient Thickness Variations and Differential X-ray Transmission Imaging NIH Fellowship Nos. 5-TO1-CA-05104-10 5-TO1-CA-05104-11	Mistretta, C. Kelcz, F.	1/15/74	423,115 12/10/73; Pat. No. 3854049 issued 12/10/74	Further development of invention progressing with contributed help (equipment gift, counsel & labor) from commercial interest.	\$ 3,000
Differential X-ray Method and Apparatus NIH Grant No. 5-TO1-CA-05104-11	Mistretta, C. Kelcz, F.	11/15/74	488,250 7/12/74 (aband. in favor of c-i-p case SN 562668)		\$ 7,500
Differential X-ray Method and Apparatus NIH Grant No. 5-TO1-CA-05104-11	Mistretta, C. Kelcz, F.	5/9/75	562,668 3/27/75 (c-i-p of SN 488250)		

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Multiplexing of Physiological Sensor Signals with Gamma Ray Camera Data Signals Grant No. PHS HRA 05 000196-09	Nickles, R.	7/1/75	586,200 6/12/75	Discussion with commercial interests initiated.	\$ 400
A Three Dimensional Fast-Coincidence Gamma Imaging System DHEW Grant No. 5-EO3-PE-00196-07	Nickles, R. Meyer, H.	4/3/73	544,883 1/29/75	One company indicated no interest after evaluation. Other potential licensees being sought.	\$ 4,500
Regulation of Insect Reproduction and/or Development NIH Grant No. 1-PO6-RR-W0779-01	Norris, D. Bridges, J.	7/3/74	No pat. app. filed to date.	Current definition of invention not adequate for preparation of pat. app.	\$ 300
Antibiotic Production by Mycoplasma Species IIRP NIH Grant No. 5R01-A1-10505	Perlman, D. Sylvestre, M. Sakai, T.	With this report	Pat. app. being drafted	Application being filed upon commercial advise - mycoplasma species new to antibiotic production.	\$ 600
Solid Phase Synthesis of Protected Peptides NIH Grant No. 5-R01-AM-15507-03	Rich, D. H. Gurwara, S.	12/3/74	575,478 5/7/75	Licensing arrangement pending.	\$ 2,000

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Immobilization of Macromolecules on Tissues NIH Grant No. 5-S05-RR-07098(07)	Richardson, T.	1/4/74	472,588 5/23/74	No commercial interest to date.	\$ 1,600
Process for Preparing L-dopa (thru microbiological means) NIH Grant Nos. 5-R01-AM-04874-09 5-T01-AM-09688-05 5-S01-FR-05456-07	Sih, C. J.	9/25/69	Pat. No. 3671397 issued 6/20/72	No commercial interest to date.	\$ 4,000
Process for Preparing dl-Strigol NIH Grant No. 2-R01-AM-4874-12	Sih, C. J.	3/11/74	450,950 3/13/74	Sufficient dl-strigol produced for evaluation by U. S. Dept. of Agriculture (in progress). No present direct commercial interest.	\$ 2,000
Process for Preparing dl-Strigol NIH Grant No. 2-R01-AM-4874-12	Sih, C. J.	With this report	532,759 12/13/74 (Div. of SN 450950)		
Process for Preparing dl-Strigol NIH Grant No. 2-R01-AM-4874-12	Sih, C. J.	With this report	532,325 12/13/74 (Div. of SN 450950)		

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Prostaglandins and Methods for Preparing Same NIH Grant Nos. A955 & B738	Sih, C.J.	1/28/72	221,058 1/26/72	Licensed to Miles Labs. Alza Corp., Johnson and Johnson, Teijin (Japan). Evaluation for commercial application proceeding.	Gross out-of-pocket expense for Sih inventions - \$73,044
3-Substituted Iodo Alkenyl Compounds NIH Grant No. AMO4874	Sih, C.J.	9/29/72	293,442 9/29/72 (aband. in favor of c-i-p case SN 504164)	Same as above.	
3-Substituted Iodo Alkenyl Compounds NIH Grant No. AMO4874	Sih, C.J.	With this report	504,164 9/9/74 (c-i-p of SN 293442)	Same as above.	
3-Substituted Iodo Alkenyl Compounds NIH Grant No. AMO4874	Sih, C.J.	With this report	504,162 9/9/74 (Div. of SN 293442)	Same as above.	
3-Substituted Iodo Alkenyl Compounds NIH Grant No. AMO4874	Sih, C.J.	With this report	504,163 9/9/74 (Div. of SN 293442)	Same as above.	

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Method for Preparing 2-Substituted-4-Hydroxy-Cyclopentane-1, 3-Diones NIH Grant Nos. AM-9688 AM-4874	Sih, C. J.	9/29/72	293,457 9/29/72	Licensed to Miles Labs, Alza Corp., Johnson & Johnson, Teijin (Japan). Evaluation for commercial application proceeding.	Gross out-of-pocket expense for Sih inventions - \$73,044
Processes for Stereospecifically Preparing-Chiral-2-Substituted-4-Hydroxy-2- Cyclo-penten-1-One NIH Grant No. AM-4874	Sih, C. J. Heather, J. B.	9/29/72	478,713 6/13/74; (continuation of SN 309766 now aband.)	Same as above.	
Rodenticide NIH Grant No. P-01-AM-14881	Suttie, J. W.	5/23/74	359,632 5/14/73 (aband. in favor of c-i-p case)	Called to attention of several companies in rodenticide business - preliminary interest to date.	\$ 4,000
Rodenticide NIH Grant No. P-01-AM-14881	Suttie, J. W.	5/28/75	576,347 5/12/75 (c-i-p of SN 359632)		

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Method and Apparatus for Dialysis NIH Grant No. GM-16133	Updike, S.J.	3/27/73	191,720 10/22/71; Pat. No. 3846236 issued 11/5/74	Commercial interests continuing evaluation of inventions.	\$ 7,500
Method and Apparatus for Dialyzing Carbon Dioxide from Blood Plasma NIH Grant No. GM-16133	Updike, S.J.	3/27/73	295,264 10/5/72 (c-i-p of SN 191720)		
Catalyst Containing Semi-Permeable Membrane for Respiratory Gas Exchange by Dialysis NIH Grant No. GM-16133	Updike, S.J.	5/15/74	434,231 1/17/74 (c-i-p of SN 191720)		

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Device and Method for Sample Application by Water Regain of a Gel NIH Grant Nos. 3M-16133 3M-70157	Updike, S. J.	1/4/74	356,092 5/1/73	Licensed to Squibb, Union Carbide, & Ames Labs. - investigation and evaluation leading to commercial application in progress. Other companies have indicated a possible interest in license.	\$16,000
Method for Immunological Determinations NIH Grant Nos. 3M-16133 3M-70157	Updike, S. J.	5/15/74	437,135 1/28/74 (c-i-p of SN 356092)		
The Preparation of Dry, Porous Gel Particles Having High Water Regain or Liquid Sampling NIH Grant Nos. 3M-16133 3M-70157	Updike, S. J.	1/4/74	356,093 5/1/73		
Reagent for Immunological Determinations NIH Grants He-09922 GM-16133 K3-HE-18184	Updike, S. J. Goodfriend, T.	4/29/70	Pat. No. 3793445 issued 2/19/74		

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<u>INVENTIONS ON WHICH DHEW WAIVED RIGHTS TO NATIONAL SCIENCE FOUNDATION</u>					
ensitization of radiothermo- luminescence in Dosimetry Grade LiF by Simultaneous annealing and Ultra- violet Illumination NIH Grant -T01-CA05104-11 NSF Grant No. 4-52-GH34585	Mayhugh, M. Fullerton, G.	2/22/74	523,322 11/13/74	Several meetings have been held with com- mercial interests. Another is scheduled with view to possible license.	\$ 2,500

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<u>JOINTLY REPORTED INVENTIONS</u> <u>DHEW INSTITUTIONAL PATENT AGREEMENT</u> <u>AND</u> <u>NSF INSTITUTIONAL PATENT AGREEMENT</u>					
The Production of Radiation Induced Thermally Activated Current (RITAC) Devices by Selective Purification of Dielectric Solid Material NIH Grant 5-T01-CA-05104-10 & 11 NSF Grant GH-34585	Moran, P. R. Podgrosak, E. Fullerton, G. Guller, G. E.	3/18/74	497,874 8/16/74	Evaluated by commercial interest - feasibility and utility of inventions confirmed. No license to date.	\$ 4,000
Oxidative Decarboxylation of Carboxylic Acids NIH Grant No. 5-R01-GM-13598 NSF Grant No. 76-1-MPS71-03396	Trost, B. M. Tamaru, Y.	3/18/75	578,533 5/19/75	Process being evaluated by commercial interest with view to possible license.	\$ 1,200