

## U.S. WOMEN SCIENTISTS CHINA STUDY TOUR ITINERARY.

| Tuesday, April 21 - Arrive Shanghai at 8:30 PM. You will be greeted by representatives of the China Women's Federation. |
|---|
|   |
| Wednesday, April 22- Shanghai   |
| Thursday, April 23 - Shanghai   |
| Friday, April 24 - Shanohai   |
| Saturday, April 25 - To Wuxi (a short train ride of 87 miles)   |
| Sunday, April 26 - Wuxi   |
| Monday, April 27 - To Nanjing (a short train ride of 100 miles)   |
| Tuesday, April 28 - Nanjing   |
| Wednesday, April 29- To Sian by air   |
| Thursday, April 30 - Sian   |
| Friday, May 1 - Sian  |
| Saturday, May 2 - To Beijing (Peking) by air  |
| Sunday, May 3 - Beijing   |
| Monday, May 4 - Beijing   |
| Tuesday, May 5 - Beijing  |
| Wednesday, May 6 - Beijing  |
| Thursday, May 7 - Beijing   |
| Friday, May 8 - Depart Beijing on Pan Am #16 at 10:30 AM, arrive Tokyo<br>at 5:00 PM                                    |
| To San Francisco - depart Tokyo at 7:00 PM on Pan Am #12;   |
| after crossing International Date Line arrive San Francisc  |
| at 12:00 noon the same day; go through U.S. Customs   |
| To Los Angeles - depart Tokyo at 7:30 PM on Pan Am #02;   |
| after crossing International Date Line arrive Los Angeles   |
| at 1:10 PM the same day; go through U.S. Customs  |

U.S. WOMEN SCIENTISTS CHINA STUDY TOUR 19th APRIL- 8th MAY 1981

## List of Participants.

Work addresses are given where known, list is alphabetical.

BEATRICE-M. BAIN University of California Systemwide Administration, University Hall, Rm 325, Berkeley, CA 94720 415 642 9300 X43 (W) 415 986 7794 (H)

Educational administrator with University of California Systemwide Administration. Currently focussing on Agricultural Sciences, particularly encouraging women and minorities to seek careers in non traditional fields, especially science.

| MERYL B | ROD | 1949 Green St., | #4 | 415 | 661 | 3402 | (W) |
|---------|-----|-----------------|----|-----|-----|------|-----|
|         |     | San Francisco,  |    |     |     |      |     |
|         | (   | CA 94123        |    | 415 | 931 | 7241 | (H) |

Doctoral candidate in Health Psychology at School of Medicine,UC San Francisco. Psychologist in the field of health specialising in the interaction and the interfacing between psychological and physiological functioning, i.e. placebo effects and philosophy of medical intervention.

RELDA CAILLEAU

7232 Staffordshire St., Apt 3 Houston, TX 77030

713 790 1937 (H)

Ph.d biochemist. Studying in vitro cultivation of human mammary carcinoma cells in tissue culture- 20 lines have been isolated.Chromosome studies showing marker chromosomes.

| ANNE CALOF | Dept of Physiology, Rm 762-S                        | 415 | 666 | 1034 | (W) |
|------------|---|-----|-----|------|-----|
|            | UCSF School of Medicine,<br>San Francisco, CA 94143 | 415 | 564 | 9690 | (H) |

B.A. neurobiologist. The study of mechanisms involved in synapse formation in culture. Techniques used-light and electron microscopy and biochemistry.

| DEBBIE | DALKE | 1111 Guerrero | 415 | 968 | 1520 | (W) |
|--------|-------|---------------|-----|-----|------|-----|
|        |       | CA 94110      | 415 | 285 | 0638 | (H) |

B.S. geologist.Working with seismic tiltmeters for petrochemical exploration and recovery. Strong interest in earthquakes.

China Study Tour list of participants, page 2

| BARBARA FILNER | Institute of Medicine,<br>National Academy of Science,<br>2101 Constitution Ave NW | 202 | 389 | 6833 | (W) |
|----------------|--|-----|-----|------|-----|
|                | Washington DC 20418  | 202 | 333 | 1521 | (H) |

Ph.d biochemist. Senior Professional Associate at the Inst. of Medicine, National Academy of Sciences. Analyse health and behaviourial sciences research and social policy, as in problems of alcohol abuse and ageing. Additional interest in employment of women in science.

CAROLE HAMILTON Jet Propulsion Lab, 512-203F 213 577 9640 (W) 213 798 6801 (H) Ph.d in Chemistry. Technical Supervisor in Telecommunications Systems, applying telecommunications or microwave techniques to several terrestial problems.

ANNE KAHLE

Jet Propulsion Laboratory, 183-504 213 354 7265(W) California Inst. of Technology, 4800 Oak Grove Dr, Pasadena, CA 91103 213 455 2583 (H)

Ph.d geologist. Research in remote sensing techniques with emphasis on geologic\_applications, eg.lithologic\_dicrimination, mineral\_exploration, soil moisture.

AMY KELLY

Physiology Dept., UCSF School of Medicine, San Francisco,CA 94143 415 666 4158 (W)

415 665 1253 (H)

Ph.d neurobiologist. Developement of mammalian visual systems involving electrophysiology and biochemistry.

LI DIA MANSON

ARL

TRW Systems, 1,Space Park, R4-2058 Redondo Beach, CA 90278 213 535 0261 (W)

213 454 4420 (H)

Dr ès Sc in Physics, M.S. Mechanical Engineering. Manage energy conservation and solar energy utilization projects. Involved in coal combustion research and the development of novel coal combustion devices.

| ENE MENCKE | Dept. of Biochemistry, | 612 373 1256 (W) |
|------------|------------------------|------------------|
|            | St Paul, MN 55108      | 612 646 0368 (H) |

Ph.d in molecular biophysics. Researching the complex carbohydrates in circulatory clearance of glycoproteins by receptor mediated endocytosis, (biochemistry).

China Study Tour list of participants, page 3

CAROL PLETCHER Dept. of Biochemistry, 612 373 1281 (W) University of Minnesota, St Paul, MN 55108 612 483 3808 (H) Ph.d biochemist. Training is in biochemistry and specialization is proteins. Investigating the calcium-dependent protein-membrane binding of prothrombin. 415 494 4757 (W) TERESA ROBERTS XEROX Corp., 3333, Coyote Hill Rd, 415 321 8156 (H) Palo Alto, CA 94304 Ph.d computer scientist. Computer scientist specialising in human factors at XEROX Corporation. Designing sophisticated office computer systems to ensure easy accessibility for the general public. Suite 1003, LYDIA SEEBACH 415 433 4940 (W) 450 Sutter St., San Francisco, CA 94108 415 346 1608 (H) M.D. specialising in internal medicine. In private practice and director of a clinical labotoratory. Subspecialty is Rheumatology. CHERRILL SPENCER Science Applications Inc., 5, Palo Alto Square, Suite 200 Palo Alto, CA 94304 415 493 4326 (W) Ph.d in elementary particle physics.Staff Scientist for consulting firm. Currently using prompt neutron activation analysis under microcomputer control to perform real-time measurements of sulfur and other elements in coal. Intending to search for free quarks in heavy metals. NANCY TOONEY Dept. of Chemistry, 212 643 5177 (W) Polytechnic Inst. of New York, 333, Jay St, 212 522 2138 (H) Brooklyn, NY 11201 Ph.d biochemist. Associate Professor of Biochemistry teaching graduate and undergraduate biochemistry. Research interests in the area of the physical biochemistry of biological macromolecules including electron microscopy of fibrinogen and circular dichroism studies of fibrinogen and fibronectin.



Department of Biochemistry College of Biological Sciences 140 Gortner Laboratory 1479 Gortner Avenue St. Paul, Minnesota 55108

January 5, 1982

Dear Fellow Travelers:

Happy New Year! May 1982 hold as much adventure and as many new friends as 1981.

Last summer I had these two slides made for you. My intention was an early Christmas present; but as with other plans.... Anyway here they are. The one captures (I hope) the essence of our emotions at the Sian airport. The other is a reminder of the Old China. Hope they add to your slide collection.

Arlene and I have been fortunate enough to share our experiences with several groups here in the Twin Cities. In all cases the groups have been very interested in our interaction with the Chinese women.

During the next few months I'll be making some changes in my career. My postdoc is finished in July and then I must do something else. The New Year's Resolution: Send my resume to various employers. Wish me luck!

Sincerely,

Garol

Carol Pletcher

CP:ba

UNIVERSITY OF MINNESOTA

Office of International Programs Academic Affairs 201 Nolte-West 315 Pillsbury Drive S.E. Minneapolis, Minnesota 55455 (612) 373-3793

June 8, 1981

To: Arlene Mencke and Carol Pletcher, Department of Biochemistry, CBS

From: Sally Flax **\*** Coordinator, China Exchange Program

Re: Your report on China Trip

Dr. Porter, the Director of OIP, will be pleased to read your report on your trip to China when he returns from vacation June 15. I took the liberty of xeroxing copies for the so-called "Women's Caucus" of an upcoming delegation going to China from this University, in September, 1981. This group will be led by President Magrath, accompanied by his partner, Diane Magrath, and a delegation of ten members. The women's caucus is developing an agenda which they hope to have considered by the Foreign Affairs Office officials of the Chinese Academy of Sciences, their host institution in China. I know they will find your report of value. If you will be agreeable, I would like to advise them to be in touch with you to explore common interests, and to have your suggestions for possible contacts they might pursue. Thank you for your offer of help via OIP.

The women's caucus includes: Barbara Lukermann, Adjunct Professor in the Humphrey Institute for Public Affairs, and Consultant in Urban Planning; Diane Magrath, Partner to the President, former staff person in Student Affairs; Martha Campbell, wife of Physics Professor Charles Campbell; and Barbara Serrin, wife of Mathematics Professor James Serrin. The Campbells have friends in China the women hope to visit. Our office is suggesting a contact in the world of journalism. You might be able to offer a channel for entre to women in the scientific community.

Please contact me at 3-3793 if you have suggestions. We would appreciate having a copy of your daily log when it is available.

c Barbara Lukermann Philip W. Porter Dean Richard Caldecott, College of Biological Sciences

#### PROPOSAL FOR CHINA STUDY TOUR

The All-China Women's Federation has invited a delegation of 20 American women scientists to visit China April 18 through May 11, 1981. The purpose of the China Study Tour is to establish contacts, to exchange professional and personal experiences, and to promote friendship and understanding between the women scientists of our two countries.

Because we have been invited by the All-China Women's Federation, we expect to visit the professional women in industry, in government, and in academia. The specialities of the American women scientists are far ranging (geologist, computer scientist, particle physicists, psychologists, biochemists) and for this reason we anticipate our contacts in the Chinese community to reflect our broad interest. This may mean that we will reach new contacts for scholarly exchange heretofore unavailable to traveling Minnesotans.

My participation in this China Study Tour is particularly beneficial to the University of Minnesota. Since I have attended the University of Minnesota and am currently a research associate in the biochemistry department, I believe I can convey an accurate picture of the quality educational and research facilities which are here. This may lead to more specific scientific collaborations, or exchange of foreign students.

The diversity of interests of the American Women Scientists is both the strength and the weakness in the proposed study tour. Because of the diversity, I do not expect highly technical conferences or symposia. However, I do anticipate that we will learn about many areas of science in China. In short I hope to return to Minnesota with an understanding of the role of science in the Chinese culture.

Women in all societies share mutual women's concerns - the well-being of their family, opportunities for personal fulfillment, health, safety, education, etc. This China Study Tour is under the direct auspices of the All-China Women's Federation not the regular China tourist organization. Because of this particular arrangement - women to women - I anticipate opportunities to share personal as well as professional experiences. Discussions with the Chinese women may lead to a real understanding of our common concerns.

In summary, I expect

a) to establish contacts with Chinese women in industry, government and academic which may lead to collaborative projects either academic or industrial;

b) to exchange professional experiences which may lead to an awareness
by the Chinese of the potentials for academic and industrial exchange in
Minnesota and an understanding by me of the role of science in the Chinese
culture; and

c) to promote friendship and understanding with the women whom I meet which may in some small way promote understanding between our two countries.

In addition, if an appropriate opportunity should arise, I will attempt to make preliminary contacts to encourage a Chinese Women's Athletic Team to visit the University of Minnesota (see accompanying letter).

- 2 -

I. Proposed Travel Budget for China Study Tour

|    | Round trip economy class group inclusive<br>tour air fare from San Francisco to Shanghai                        | \$1,300.00 |
|----|---|------------|
|    | Land costs including hotels, meals, internal transportation, visa fees, guides and interpreters in China        | 2,550.00   |
|    | Round trip economy class air fare from Twin Cities<br>to San Francisco  | 600.00     |
|    | Accomodations and meals for 1 day in San Francisco<br>during the briefing session before departure for<br>China | _100.00    |
|    | Total costs   | \$4,550.00 |
| Π. | Monies available from NIH fellowship  | 2,550.00   |
| п. | Requested from Office of International Programs   | 2,000.00   |

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Supervisor - Re . S. Loor, S. Scall of Clean as Broingies, Ann Scall States and

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#### CURRICULUM VITAE

#### Carol H. Pletcher

## Department of Biochemistry University of Minnesota Gortner Laboratory St. Paul, Minnesota 55108

#### Education:

NIH postdoctoral fellow in the laboratory of Dr. Gary L. Nelsestuen (University of Minnesota). Research: Calcium-dependent Interaction of Prothrombin with Membranes.

Ph.D. Biochemistry, 1979 (University of Minnesota) Research: Synthesis Secretion, and Stability of  $exo-\beta$ -D-Galactofuranosidase. Thesis advisor Dr. J. E. Gander. American Association of University Women Fellow, 1977-1978.

M.S. Chemistry (University of Michigan). Recipient of a Paul I. Mureill Scholarship.

B.S. Chemistry <u>cum laude</u> (Juniata College). Elected to the Juniata Honor Society, and recipient of the Brumbaugh Science Award in Chemistry.

#### University Employment:

Teaching Fellow, Department of Biochemistry, Univ. of Minnesota, St. Paul, MN (1974-1975)

Junior Scientist for Dr. William E. M. Lands, Dept. of Biological Chemistry, Univ. of Michigan, Ann Arbor, MI (6/70-8/71)

Lecturer (General Chemistry Coordinator) Dept. of Chemistry, Univ. of Michigan, Ann Arbor, MI. Supervisor: Dr. R. C. Taylor, Assistant Chairman of the Chemistry Department (8/68-6/69)

Teaching Fellow, Department of Chemistry, Univ. of Michigan, Ann Arbor, MI (8/66-4/68)

#### Industrial Employment:

Biochemical Pharmacologist for Minnesota Mining and Manufacturing, St. Paul, Minn. Supervisor: Robert Ober, Supervisor of Drug Metabolism, Riker Labs. (2/72-7/73)

Junior Research Chemist for Parke Davis and Company, Ann Arbor, Michigan. Supervisor: Dr. H. Geer, Head of Chemical Biological Records (8/69-5/70)

#### Technical Experience:

A. Protein Chemistry - Chemically modified prothrombin fragment 1 and ascertained the effect on the calcium-dependent membrane binding; partially purified and assayed exocellular fungal glycoproteins; assisted with the preparation and assay of prostaglandin synthetase, and prepared substrates and performed kinetic analysis of acyl transferase. In short, I have had experience in the purification and characterization of both soluble and membrane bound proteins. Techniques with which I am familiar include column chromatography (affinity, hydrophobic, ion exchange, and gel permeation), high performance liquid chromatography (gel permeation, reverse phase), centrifugation, electrophoresis, amino acid analysis, sequencing, UV and fluorescence spectroscopy, light scattering. B. Microbiology Background - Elucidated the nutritional requirements for the production of several exocellular proteins by <u>Penicillium charlesii</u>. This research required the use of standard sterile techniques for maintaining cultures and it entailed the modification of nutrients and medium conditions.

C. Pharmacological Experience - Analyzed body fluids and tissues from both animal and human samples for drugs and drug metabolites. This research required the use of radiolabelled drugs and various analytical techniques for drug identification including fluorescence and nmr (3M Company).

#### Administrative Experience:

A. Coordinator of General Chemistry (University of Michigan) - Organized classroom requirements, registration, and laboratory apparatus for 2,000 students in four different courses; piloted new experiments for introduction into the curriculum; organized teaching fellow assignments; compiled and edited a problem book and a laboratory manual; assisted students with administrative problems (course changes, grade errors, and graduation requirements), taught recitation and laboratory sections. There were four employees under my supervision.

B. Chemical-Pharmacological Liason - Cataloged new organic chemicals, recorded pharmacology test results, and acted as a liason between chemists and pharmacologists for drug development (Park-Davis).

Personal Information:

Born: April 6, 1944

Married: Wayne A. Pletcher on April 20, 1968

Children:

Birthdates:

Mark Wayne Erik Vincent '8/24/74 1/28/79

Hobbies: Cooking, Sewing, Amateur Antique Collector

#### Publications:

- Pletcher, C. H., Resnick, R. M., Wei, G. J., Bloomfield, V. A. and Nelsestuen, G. L. (1980) 'Deglycosylated Prothrombin Fragment 1. Calcium Binding, Phospholipid Interactions, and Self-Association'. J. Biol. Chem. 255, 7433-7438.
- 2. Nelsestuen, G. L., Resnick, R. M., Kim, C. S. and Pletcher, C. H. (1980) "Prothrombin Fragment 1 Modifications: Effects on Protein-membrane Interaction" in Vitamin K Metabolism and Vitamin K-dependent Proteins (Suttie, J. W., ed.) pp. 28-38.
- 3. Nelsestuen, G. L., Resnick, R. M., Wei, G. J., Pletcher, C. H. and Bloomfield, V. A. (1981) 'Metal Ion Interaction with Bovine Prothrombin and Prothrombin Fragment 1. Stoichiometry of Binding, Protein Self-Association and Conformational Change Induced by a Variety of Metal Ions''. Biochemistry 20, 351-358.

- 4. Nelsestuen, G. L., Resnick, R. M., Wei, G. J., Pletcher, C. H. and Bloomfield, V. A. (1980) "Cation Interaction with Bovine Prothrombin and Prothrombin Fragment 1. Stoichiometry of Binding, Self-Association and Conformational Change" in <u>Calcium-binding proteins and calcium function</u> (F. Siegel, ed.), pp. 433-440.
- Pletcher, C. H., Resnick, R. M., Wei, G. J., Bloomfield, V. A. and Nelsestuen, G. L. (1980) 'Deglycosylated Prothrombin Fragment 1. Calcium Binding, Phospholipid Interaction and Self-Association in Calcium-binding proteins and calcium function (F. Siegel, ed.), pp. 471-472.
- 6. Pletcher, C. H. and Nelsestuen, G. L. (1980) 'Modification of NH<sub>2</sub> Groups in Prothrombin Fragment 1: Effects on Calcium Binding and Phospholipid Binding'. (Submitted).
- Rietschel-Berst, M., Jentoft, N. H., Rick, P. D., Pletcher, C. H., Fang, F. and Gander, J. E. (1977) "Extracellular exo-β-Galactofuranosidase from Penicillium charlesii: Isolation, Purification and Properties". J. Biol. Chem. 252, 3219-3226.
- Pletcher, C. H., Lomar, P. D. and Gander, J. E. (1980) "Factors Affecting the Accumulation of Exocellular exo-β-D-Galactofuranosidase and Other Enzymes from Penicillium charlesii". Experimental Mycology, in press.
- 9. Pletcher, C. H., Wei, G. J., Resnick, R. M. and Nelsestuen, G. L. (1980) "Deglycosylated Prothrombin Fragment 1. Calcium binding, Phospholipid Interaction and Self-Association". Fed. Proc. 39, 1503.
- Pletcher, C. H. and Gander, J. E. (1978) "The Effect of Nutrients on Exoβ-D-Galactofuranosidase Activity in Culture Medium of <u>Penicillium</u> charlesii". Fed. Proc. 37, 1411.
- 11. The University of Michigan General Chemistry Study Questions (1969) printed by Braun-Brumfield, Ann Arbor, Michigan (112 pages).
- 12. A Laboratory Manual of General Chemistry (1969) printed by Braun-Brumfield, Ann Arbor, Michigan (133 pages).

U.S. 中 WOMEN国女 SCIENTISTS 学 CHINA STUDY > 王 TOUR - 1981 放 オ

U.S. WOMEN SCIENTISTS CHINA STUDY TOUR 19 April- 8 May 1981 Details of Group Expense Account, prepared by Tour Leader-Cherrill M. Spencer.

| Received from each tour member for group expenses:  | \$51.25  |
|---|----------|
| Spent on behalf of each tour member for buttons,  | \$42.25  |
| Paid exit fee at Beijing airport for each tour<br>member.(This fee should be reimbursed by the<br>travel agent to each tour member) | \$5.99   |
| Paid to group photographer (Nancy Tooney) on  | \$3.01   |
| TOTAL SPENT on group expenses on behalf of eachtour member  | -\$51.25 |

Extra expense which should eventually be reimbursed by our travel agentthe U.S. Travel Bureau:

We were obliged to take a train from Xian to Beijing on 1st-2nd May because our plane flight was cancelled due to a tremendous dust storm. We each had to pay for our own train ticket, cost =114 yuan. This cost was <u>more</u> than the cancelled plane flight, which was 97.40yuan. The All China Women's Federation reimbursed us for the difference = 16.60 yuan. The tour's emergency fund, which was held by Cherrill M. Spencer,was used to make a partial reimbursement towards the cost of the train ticket. This amounted to \$31.25 paid to each tour member. There remains \$58.30-\$31.25= \$27.05 to be refunded to each tour member. The unused air coupons have been sent to the travel agent and we expect this refund to be paid as soon as the agent has recovered the money for these unused coupons from Pan Am. Consequently each tour member is currently owed \$27.05+\$5.99=\$33.04 by the travel agent.

Signed Cherrill M. Spencer, 12th May 1981 Tour Leader.

U.S. 中 WOMEN国女 SCIENTISTS 学 CHINA STUDY > TOUR - 1981

Science Applications Inc., 5,Palo Alto Square, Palo Alto,Ca 94304

19th May 1981

Mr David Perlman, San Francisco Chronicle, Science Editor, 5th and Mission Sts, San Francisco,Ca 91403.

Dear Mr Perlman,

I spoke with you on the phone briefly on April 14th about an upcoming tour I was to lead to China--the U.S. Women Scientists China Study Tour. We returned from this visit to China last week and I am writing to let you know what a marvellous time we had.

One of our goals was to meet with our Chinese counterparts in order to see the scientific work they were engaged in and also to discuss with them their education, life-styles and to find out if they suffered any barriers in their scientific careers on account of their sex.

Under the auspices of our hosts the All China Women's Federation we visited about 26 different institutions including the Institutes of Physiology and Biochemistry and Fudan University in Shanghai, and the Institutes of High Energy Physics, Geophysics, Computing Technology, Biophysics, Psychology, and the Space Science and Technology Centre, Central Coal Mining Research Institute, State Seismological Bureau, Capitol Hospital, Communication Bureau of the Ministry of Electric Power and the Research Institute of Automation for the First Ministry of Machine Building in Beijing. Tour members only visited those institutes coinciding with their own work.

At every institute we not only visited their experimental laboratories but also talked freely and at length with women scientific and technical workers about the subjects mentioned above.

The highlight of our tour was an hour long meeting we had with Vice-Premier Fang Yi (in charge of the State Science and Technology Commission) in the Great Hall of the People, during which he answered several of our spontaneous questions. We were also pleased to hear that our arrival at a banquet in our honour at the Great Hall of the People had been televised on the national TV news, and also reported on in the "People's Daily".

Of course we also visited many of the usual tourist sights in the cities of Shanghai, Wuxi, Nanjing, Xian and Beijing and also visited a People's Commune, a Worker's Village, a Children's Palace, a Worker's Mr David Perlman, Page 2

Cultural Palace and a Neighbourhood(in Beijing).We also attended the Beijing Opera (twice!), a local opera, some acrobatic shows and a modern dance drama (revolutionary ballets being a thing of the past).

As you can imagine we had an extremely busy visit which we all thoroughly enjoyed and which we feel gave us all a much better understanding of modern Chinese society and especially the role of Chinese women in the scientific and technical basis of their Four Modernisations programme.

Eight of the 16 tour members live and work in the Bay Area and any of us are willing to talk to you (or Mike Robertson to whom I am sending a copy of this letter) at length about our impressions and experiences of China if you would like to run an article on our visit. We can provide you with black and white photographs of many of our scientific visits and our meeting with Vice-Premier Fang Yi.

Please telephone me either at my office number-415 493 4326 or at my home-415 493 1560 if you would like to arrange a meeting or get the names and numbers of other tour members.

> Yours Sincerely Cherrill M. Spencer Cherrill M. Spencer (Dr) U.S. Women Scientists China Study Tour Leader.

CC. Mike Robertson, People's Section, San Francisco Chronicle.

Please let we have your new work of address! U.S. 17 WOMEN国女 SCIENTISTS 学科美 CHINA STUDY 5] TOUR — 1981 旅家 MAIH

Palo Alto,California 23 May 1981.

Dear Carol

We've been back two weeks now and I've just about recovered from our great trip--hope you have too!

I'm enclosing an official description of the Group Expense account, if your institution needs to see receipts for the monies you paid to the travel agent please ask the USTB to send you them. I phoned and wrote to USTB as soon as we returned and sent them the unused air coupons and train tickets, they saw no problem in getting a refund from Pan Am for the cancelled air flight. I asked that they send the final refund of \$33.04 to each of you individually.

Meryl tells me that the first draft of the tour diary is being typed and she will be sending it out to all of us for our corrections and modifications, I'm looking forward to seeing it.

My slides of our trip do not include several subjects that I would like to buy a copy of off anyone who has a good slide, they aregangs of women mending the road; women working on construction sites; the English and Physics classes at the Nanjing Middle school; any of the performances we attended (opera, acrobats, dance drama); any banquet table; any brief introduction; please let me know soon if you have any of these subjects as a slide? thanks.

The Bay Area AWIS chapter has asked those of us in the Bay Area to give them a show and tell on Monday June 8th at 7.30pm in the Health Sciences West building at UC San Francisco, please contact Ann Calof if you wish to help.

I enclose a copy of the letter I sent to the science editor of the San Francisco Chronicle re our trip and his reply, I haven't heard from the other editor yet. I know Barbara and Nancy will be writing an article for the AWIS newsletter, does anyone else want to volunteer to write something for "Ms", "Science", or any other journal/magazine? Please let me know so we have only one article going to any one publication. I'm expecting that Nancy will be sending round some contact sheets of the black and white photos soon from which you can order copies.

Thank-you very much again for your assistance and co-operation during the tour, it was a relief to me to have other people in charge of most of the logistics and the co-operative feeling of the group and our excellent attendance (at visits) record contributed to the success of our tour.

Cherrill

# San Francisco Chronicle

THE VOICE OF THE WEST

May 21, 1981

Dr. Cherrill Spencer Leader, U.S. Women Scientists China Study Tour Science Applications, Inc. 5 Palo Alto Square Palo Alto, CA 94304

Dear Dr. Spencer:

Thank you for your letter of May 19. I'm delighted your group had such an interesting and fruitful visit to Chinese scientific institutions, and you seem to have spent time at many of the same laboratories and research facilities that I reported on when I was in China in 1979 with a small group of American science writers. We, too, incidentally, had a long meeting with Fang Yi to discuss science writing in the context of the "four modernizations".

I really don't see a science story on your visit, but I'll jog Mike Robertson in case he wants to arrange interviews for a piece in the "People" section of the Chronicle.

Thanks again for writing.

Yours sincerely,

David Perlman Science Editor

DP/jw

| RESERVATION FORM : U.S. WOMEN SCIENTISTS CHINA STUDY TOUR 1981.  |
|--|
| To Cherrill M. Spencer, Science Applications Inc., Suite 200, 5, Palo Alto Sq., Palo Alto, Ca 94304.   |
| From Carol H. Pletcher Date 2-4-81   |
| Address Dept. Biochem. Unis. of Minnesota, Gortner Labs  |
| St. Paul State MN Zip 55108  |
| 617-   |
| Work Phone 373 - 1287 Home Phone 483 - 3808  |
|  |
| Please check appropriate boxes and fill in other information.  |
| I DO wish to take part in the China Study Tour.  |
|  |
| this will be returned to me if the tour is full and I do not wish to be<br>put on a waiting list.  |
| If the tour is full please put me on the waiting list and keep my \$600  |
| cheque until <u>April 1,1981</u> (date you are prepared to wait until to see<br>if there any cancellations,if there is a waiting list)after that please<br>return my cheque to me. |
| I have enclosed a two-sentence description of myself, but need a little<br>more time to prepare my one page statement and current c.v.   |
| I have enclosed all the items you asked for.   |
| I am a smoker non-smoker   |
| I wish to room with the following person Can we rotate .   |
| I wish to room with a smoker 🗌 non-smoker 🖃  |
|  |

Please not the payment schedule and the cancellation penalties. The USTB will send you info on how to buy trip cancellation insurance if you join the tour.

My training is in biochemistry and my specialization is proteins. Currently I am investigating the calcium-dependent protein-membrane binding of prothrombin.

recent tions of prothronic with but the column and the persphilipped. Selection and specific chemical additionies of the protein shield are selected mentitional approach to thencitying parts of the protein shield are selected for a given biological function. Rispe such an approach, an have asset dent the point the darge of the melos proups to estenation for both estimate himeling and photopholipid bindles. In contrast, the carbodyings can be rescale without any effect on column biologics of photophologics.

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## Current Research Interest

The conversion of prothrombin to thrombin, a critical step in blood coagulation, requires calcium ions and phospholipids in the form of a membrane. The long range goal of this project is to understand the chemical interactions of prothrombin with both the calcium and the phospholipid. Selective and specific chemical modification of the protein affords an operational approach to identifying parts of the protein which are essential for a given biological function. Using such an approach, we have shown that the positive charge at the amino groups is essential for both calcium binding and phospholipid binding. In contrast, the carbohydrate can be removed without any effect on calcium binding or phospholipid binding.

## Trip Objective:

My objective in my visit to China is to learn about my counterpart: How she is educated; How she lives; How she works; What are her professional options; What is the social and cultural climate in which she strives to achieve her professional goals.

I would like to visit the various educational institutions (elementary schools, high schools, and universities) where the basic foundations in science are taught and I would like to learn how career decisions are made. Along the same line I would like to visit with professional women scientists who are working in business, government and academia.

Besides visiting with students and professionals, I would like to see the laboratories and libraries which are available. As a chemist, I am particularly interested in the chemistry and biochemistry facilities.

Working women in all societies and professions have a need for assistance with child care and perhaps with household duties. As a mother with two small children I am particularly interested in visiting the child care facilities available to my counterpart. Also I hope to discuss with my counterpart the Chinese answer to household chores.

As for typical tourist sites, I want to visit the historical sites of wherever we are and also other public institutions of interest. I would like to visit a Chinese home, bicycle through some typical sections of a city, visit the Chinese shopping areas, tour a factory, and visit a handicraft factory. I hope to savor the flavor of an ancient civilization mingling into the modernizing country. I. Personal Information

Carol H. Pletcher 2572 Irene St. Roseville, MN 55113 612/483-3808

Born: April 6, 1944

Married: April 20, 1968

Husband: Wayne A. Pletcher Technical Manager 3M Company

Wayne received his Ph.D. in organic chemistry from Univ. of Michigan.

Children:

Born:

Mark Wayne Erik Vincent

August 24, 1974 January 28, 1979

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Hobbies: Sewing, amateur antique collector, cooking

Carol H. Pletcher Dept. of Biochemistry Univ. of Minnesota St. Paul, MN 55108 612/373-1287

#### II. Professional Information

#### Education:

NIH postdoctoral fellow in the laboratory of Dr. Gary L. Nelsestuen (University of Minnesota). Research: Calcium-dependent Interaction of Prothrombin with Membranes.

Ph.D. Biochemistry, 1979 (University of Minnesota) Research: Synthesis Secretion, and Stability of  $exo-\beta$ -D-Galactofuranosidase. Thesis advisor Dr. J. E. Gander. American Association of University Women Fellow, 1977-1978.

M.S. Chemistry, (University of Michigan). Recipient of a Paul I. Mureill Scholarship.

B.S. Chemistry <u>cum</u> laude (Juniata College). Elected to the Juniata Honor Society, and recipient of the Brumbaugh Science Award in Chemistry.

#### Technical Experience:

A. Protein Chemistry - Chemically modified prothrombin fragment 1 and ascertained the effect on the calcium-dependent membrane binding; partially purified and assayed exocellular fungal glycoproteins; assisted with the preparation and assay of prostaglandin synthetase, and prepared substrates and performed kinetic analysis of acyl transferase. In short, I have had experience in the purification and characterization of both soluble and membrane bound proteins. Techniques with which I am familiar include column chromatography (affinity, hydrophobic, ion exchange, and gel permeation), high performance liquid chromatography (gel permeation, reverse phase), céntrifugation, electrophoresis, amino acid analysis, sequencing, UV and fluorescence spectroscopy, light scattering.

B. Microbiology Background - Elucidated the nutritional requirements for the production of several exocellular proteins by <u>Penicillium</u> charlesii. This research required the use of standard sterile techniques for maintaining cultures and it entailed the modification of nutrients and medium conditions.

C. Pharmacological Experience - Analyzed body fluids and tissues from both animal and human samples for drugs and drug metabolites. This research required the use of radiolabelled drugs and various analytical techniques for drug identification including fluorescence and nmr (3M Company).

#### Administrative Experience:

A. Coordinator of General Chemistry (University of Michigan) - Organized classroom requirements, registration, and laboratory apparatus for 2,000 students in four different courses; piloted new experiments for introduction

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into the curriculum; organized teaching fellow assignments; compiled and edited a problem book and a laboratory manual; assisted students with administrative problems (course changes, grade errors, and graduation requirements), taught recitation and laboratory sections. There were four employees under my supervision.

B. Chemical-Pharmacological Liason - Cataloged new organic chemicals, recorded pharmacology test results, and acted as a liason between chemists and pharmacologists for drug development (Park-Davis).

#### Publications:

- Pletcher, C. H., Resnick, R. M., Wei, G. J., Bloomfield, V. A. and Nelsestuen, G. L. (1980) "Deglycosylated Prothrombin Fragment 1. Calcium Binding, Phospholipid Interactions, and Self-Association". J. Biol. Chem. 255, 7433-7438.
- Nelsestuen, G. L., Resnick, R. M., Kim, C. S. and Pletcher, C. H. (1980) "Prothrombin Fragment 1 Modifications: Effects on Protein-membrane Interac- tion" in <u>Vitamin K Metabolism and Vitamin K-dependent Proteins</u> (Suttie, J. W., ed.) pp. 28-38.
- 3. Nelsestuen, G. L., Resnick, R. M., Wei, G. J., Pletcher, C. H. and Bloomfield, V. A. (1980) 'Metal Ion Interaction with Bovine Prothrombin and Prothrombin Fragment 1. Stoichiometry of Binding, Protein Self-Association and Conformational Change Induced by a Variety of Metal Ions'. Biochemistry, in press.
- 4. Nelsestuen, G. L., Resnick, R. M., Wei, G. J., Pletcher, C. H. and Bloomfield, V. A. (1980) "Cation Interaction with Bovine Prothrombin and Prothrombin Fragment 1. Stoichiometry of Binding, Self-Association and Conformational Change" in <u>Calcium-binding proteins and calcium function</u> (F. Siegel, ed.), in press.
- Pletcher, C. H., Resnick, R. M., Wei, G. J., Bloomfield, V. A. and Nelsestuen, G. L. (1980) 'Deglycosylated Prothrombin Fragment 1. Calcium Binding, Phospholipid Interaction and Self-association''in <u>Calcium-binding</u> proteins and calcium function (F. Siegel, ed.), in press.
- 6. Pletcher, C. H. and Nelsestuen, G. L. (1980) 'Modification of NH<sub>2</sub> Groups in Prothrombin Fragment 1: Effects on Calcium Binding and Phospholipid Binding'. (submitted).
- Rietschel-Berst, M., Jentoft, N. H., Rick, P. D., Pletcher, C. H., Fang, F. and Gander, J. E. (1977) 'Extracellular exo-β-Galactofuranosidase from <u>Penicillium charlesii</u>: Isolation, Purification and Properties''. J. Biol. <u>Chem. 252, 3219-3226.</u>
- Pletcher, C. H., Lomar, P. D. and Gander, J. E. (1980) "Factors Affecting the Accumulation of Exocellular exo-β-D-Galactofuranosidase and Other Enzymes from Penicillium charlesii". Experimental Mycology, in press.
- 9. The University of Michigan General Chemistry Study Questions (1969) printed by Braun-Brumfield, Ann Arbor, Michigan (112 pages).
- 10. A Laboratory Manual of General Chemistry (1969) printed by Braun-Brumfield, Ann Arbor, Michigan (133 pages).

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UNIVERSITY OF MINNESOTA

College of Biological Sciences 123 Snyder Hall 1475 Gortner Avenue St. Paul, Minnesota 55108

Office of the Dean

February 12, 1981

Dr, Philip Porter Office of International Programs 201 N.C.C.E. Minneapolis Campus

Dear Phil:

It has just been brought to my attention that two women post-doctoral fellows in the Biochemistry Department (Arlene J. Mencke and Carol H. Pletcher) have been given the unique opportunity of visiting China under the sponsorship of the All China Women's Federation.

Based on the visits we had in China, it is obvious that these young women will have an opportunity to see a spectrum of Chinese life that was not available to us. I personally view it therefore as very important that we find the mechanism to enable both of them to visit China without a personal financial sacrifice.

One of the difficulties that they may encounter is the regulation that no two people from the same department can be supported by OIP for foreign travel. I would urge that this rule be laid aside in the present circumstance for two reasons. First, because I think they will benefit greatly from one another's company and comfort in such a visit to China. Second, that I think the University of Minnesota will gain tremendously from having the two of them present.

It is my understanding that the additional resources they require amount to \$2000 each. I would appreciate it if you could do everything possible to provide those resources. Because they are leaving April 18, there is some urgency in their knowing that the funds are available so that they can finalize their plans.

Thank you for your consideration.

Sincerely yours,

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Richard S. Caldecott Dean

RSC:mt cc: Meiling Hsu

