



CHUST – Chemical U.S. Travels

Travel Story 2016



Name: Emil Sundäng Peters

Year and line of study at KTH: year 4 Biotechnology

Which university did you visit? (Name, city, state): University of Notre Dame, South Bend, Indiana

Time frame: 6 June to 12 Aug

Visa type: J1

Insurance: Gouda Reseförsäkringar - "Leva Utomlands"

Scholarship: Paid by Notre Dame 300 USD per week

Please write about your travel, internship and time in the U.S. by answering the questions below as detailed as possible, in 1-2 pages. You may answer in Swedish or English.

Project description

Can you describe the project you were working on?

Effect of Cold Atmospheric Plasma Jet irradiation on DNA with Gold nanoparticles. So what was done in the project was that the effect of Gold nanoparticles (AuNP) was investigated to see whether or not they gave a protection against Cold Atmospheric plasma (APPJ) irradiation. As well followed that one had to investigate the effect on DNA from irradiated PBS as well as AuNP in without irradiation.

What subject area did it cover?

This area could be said to be either Physics or Biotechnology. The lab consists mostly of physicists which work on plasma and DNA. The work done can be applied to cancer research and / or food industry. Plasma is quite a broad field So performing DNA electrophoresis and studying DNA make it feel more Biotech.

How did the contact with the Professor/supervisor work?

Rad lab position is a bit different then the others I guess, Jay LaVerne is the person responsible for interns. But since Jay mostly do physics it might be hard (specially as biotech) to work for him. So what they do is let you talk to the other professors the first days and then decide what group you want to join. The professor I was working for was Sylwia Ptasińska. Sylwia was more or less always available and came around and talk to everyone about what they done each day at least once a day.

How long was an average day in the lab?

The length of the day varies with the experiment currently present. My normal day was me dropping into the lab around 8-9 am and then working until 4 pm. But some day it could be 8am-8pm or it could be noon-6pm. Flexible as long as you did your research.

What new things have you learned during the project?

It is hard to say what exactly, what it has given is more lab experience as well as more insight into how research actually is performed.

Was your prior knowledge sufficient for you to handle the tasks presented to you?

Yes, the hardest part was designing your experiments. If any thing was unclear you could always ask the others around. In generally I would say it was quite easy.

How much responsibility were you given?

I would say quite a lot I was allowed to work alone in the lab at any hour of the day and reported directly to the professor. Though for the plasma you need high voltage training at Notre Dame which is only given once a year so for that I needed a Gradstudent or Post-doc to sit in the same room to “supervise” me.

Campus life**What was life like at the university you visited?****Campus life, nightlife and potential trips?**

So since it is summer most people are gone, they did have some things going on at campus from time to time. As BBQ, bone fires and so on. I myself did not participate in it much was spending more time with room-mates. So for outside ND area there are pubs here and there which are quite nice.

So for trips it is really easy to go to Chicago, 13,5 USD and 3 hour train trip. There you can find most things you want. Other wise if you know some one or rent a car Michigan and Indiana offers a lot of different trips. All from beach to distilleries, nature and so on.

How much did it cost living in your city?

So living is hard for me to estimate, but I felt it was not to expensive. Some things where worse then in Sweden some things where cheaper.

My expenses where 5000 sek housing, 40-60 usd per week (store bought). Then to that add eating lunch or going to a pub.

How did you finance the stay in the U.S? Scholarship or private funds?

I funded my stay with the money from Notre Dame and private funds. 3000 USD for 10 weeks was paid, before tax.

If you received any scholarship, did you need to send any documents to the university in order to receive the funds?

Notre dame class it as salary and not scholarship so this was not needed. Once you are there you do need a USA bank account to receive it.

How did you find housing during your stay at the university and how much did it cost?

The house I lived in was found on Airbnb (Aislin Cajuncottage). The price was 5000 sek per month, this included utilities (electricity, garbage collection and so on), cleaning, laundry and some food, as well as a tourist guide on weekends if she was free. Took about 15-20 min to campus from the house with bike and maybe 45 min 1 hour to walk for me.

How satisfied were you with the housing situation?

Very.

Application

Were there any problems that did arise during your stay that you think future students need to know about? In such case, which problems did you encounter?

I would not call it problems but it felt a bit messy. But they will give you a check list of the stuff you need to sort out. The biggest problem was to get a bank account. Some wanted Social Security NR and some just wanted a proof of residence = 2 official letters like gas, water or other invoice. Later I was informed that a lease contract was also a valid proof.

What documents did you need to send to the university and what did you need to bring to the embassy in order to get your visa approved?

To get a DS-2019 they wanted to know previous visas I had, proof of ability of speaking english, proof of support (bank statement or if you have another scholarship), copy of passport, and a blanket they sent me to fill out.

At the embassy I needed passport, picture according to embassy's requirements, skatteverkets personbevis alla relationer (in english), DS-2019, bank statement, proof I paid for my visit to the embassy.

May we publish your travel story on the official CHUST webpage (kongligkemi.se/chust) so that future exchange students can be helped by the information?

Yes

Thank you for taking the time to fill out this form and share your story!

Name the document according to: "University – Your Name" and send it as a PDF to chust@k.kth.se

Best regards,
CHUST committee 2015/ 2016