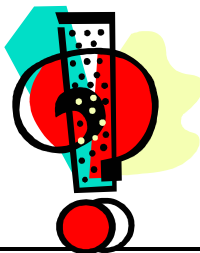


Offizin oder Industrie

Pharmaziestudenten stehen verunsichert vor grosser Entscheidung

Für nächstes Herbstsemester ist an der Uni Basel die Einführung des neuen Masterstudien-ganges in Pharmazeutischen Wissenschaften geplant.



Er bietet eine Alternative zum bisherigen Studiengang Master in Pharmazie, welcher mit dem eidg. Diplom abgeschlossen wird.

Master Pharmazie	Master Pharmazeutische Wissenschaften
3-4 Jahre Doktorat	3-4 Jahre Doktorat
1 Jahr Assistenzjahr	
1 Jahr Masterstudium Vertiefung	1.5 Jahr Masterstudium Vertiefung Industrie
3 Jahre Bachelorstudium	

Dieser Studiengang ist speziell für die Industrie konzipiert. Er bietet den Studentinnen und Studenten, welche sich nicht die Apotheke als Berufsziel setzten, die Möglichkeit, sich auf den Gebieten Forschung und Entwicklung zu spezialisieren. Anstelle des Assistenzjahres, während dem man sich vor allem offizinspezifisch weiterbildet, werden industrierelevante Themen vertieft.

Im Sommer werden sich die Studenten entscheiden müssen, ob sie als Master „Pharmazie“ oder Master „Pharmazeutische Wissenschaften“ abschliessen wollen. Somit bestehen unter den Studierenden einige Diskussionen über die zukunftsweisende Entscheidung.

Umfrage im 3. Jahreskurs der Universität Basel

Speziell für diesen Artikel wurde eine Umfrage unter den Studierenden des 3. Jahres gestartet. Geantwortet haben 32 von 72

Studierenden. Die Befragten mussten sich für einen der folgenden Antworten entscheiden:

1. Ich mache das eidg. Dipl. und werde Apotheker.

2. Ich mache das eidg. Dipl., um mich erst später entscheiden zu müssen.

3. Ich mache das eidg. Dipl., weil es viel Erfahrung bringt, werde aber höchstwahrscheinlich in die Industrie gehen.

scheinlich nicht in der Apotheke arbeiten.

4. Ich werde mich in der Industrie profilieren, und nie in einer Apotheke arbeiten.

Frage	Ja, mache ich:
1.	10
2.	9
3.	12
4.	3

Die Antworten der Umfrage ergaben ein interessantes Resultat. Nur drei Personen entschieden sich für die 4. Antwort und zeigten sich bereit, die neue Ausbildung zu wählen. Die meisten haben Interesse an Berufen in der Industrie, ziehen es aber vor, das eidg. Diplom zu absolvieren.

Die neue Variante fand grosses Interesse, bei den Personen, die sich schon sicher sind, später in einer grösseren Firma zu arbeiten. Sie können so das Assistenzjahr in der Offizin auslassen, welches für sie einen Umweg bedeuten würde. Dessen Schwerpunkt liegt im Apothekerberuf und deckt sich nicht mit den Zielen der Industrie. Ebenfalls wird erwartet, dass man als Master der Pharmazeutischen Wissenschaften besser gewappnet ist für die Industrie. Jedoch entfällt die

Möglichkeit später in einer Offizin oder in einer Spitalapotheke zu arbeiten. Es ist unwahrscheinlich, dass jemand das Assistenzjahr mit einem marginalen Lohn später nachholen möchte. Diese Person müsste wieder den Lebensstandard eines Studenten annehmen. Dies ist, nachdem man einmal Lohn bezogen hat, nur noch in den seltensten Fällen möglich. Aus diesem Grunde schliessen einige mit dem Eidgenössischen Apothekerdiplom ab und halten sich alle Tore offen. Gleichzeitig wird das Praktikum auch als Chance betrachtet, um wertvolle Erfahrungen im Verkauf und Umgang mit den Kunden zu sammeln.

Skepsis gegenüber Neuem

Aufgrund der geringen Informationen, welche den Studierenden zur Verfügung stehen, betrachten viele das neue Studienangebot kritisch. Es haben sich nur solche für die neue Ausbildung entschlossen, die nicht in der Apotheke arbeiten wollen. Die Personen, welche sich sicher sind später in der Industrie zu wirken und denen die Apothekertätigkeit auch gefällt, hatten sich jetzt auch für den Master of Phar-

mazie entschieden. Sie konnten sich bisher nicht für den neuen Masterstudiengang motivieren. Ihnen fehlen stichhaltige Ausführungen über das neue Vorhaben. Ebenfalls besteht eine gewisse Lethargie gegenüber neuen Ausbildungen, da sich die Generation der heutigen Studenten schon so einige Bildungsreformen gefallen lassen musste.

Interesse wäre Vorhanden

Das Vorhaben die Ausbildungswege zu trennen stösst bei einigen auf Interesse. Jedoch können sich, wegen zu grosser Unsicherheiten, leider nur wenige definitiv für den neuen Masterstudiengang entscheiden. Denkbar ist auch, dass der neue Mastertitel bei den Chemikern und Biologen auf Interesse stösst. Personen aus dem Pharmazie Bachelorstudium, welche sich für den neuen Studiengang entschieden haben, zeigen eine grosse Motivation für die neue Ausbildung und freuen sich die ersten Master der Pharmazeutischen Wissenschaften zu sein.

E. Gubler

Student, Dep. of Pharmaceutical Sciences, University of Basel

The reform of the studies in pharmacy

Attractive jobs as an industrial pharmacist

Before the reform of the studies in pharmacy, there was no need to decide in advance to follow a career in a hospital, retail pharmacy or in the industry becoming an industrial pharmacist. With the introduction of a master in pharmacy - and in parallel - a master in pharmaceutical sciences, the two career tracks have now a

separate curriculum in education. However, there is still a possibility to do both, albeit at the expense of time invested. In this context, it has to be kept in mind that the vast majority of the pharmacists working in industry holds a PhD. Thus, the type of master does not matter as much.

It is evident, that the focus in **the choice of the topic** of your

PhD thesis **can be relevant** if the competition for the job in industry becomes harder. In the broad field of industrial pharmacy, there are many opportunities, see www.gsia.ch, the website of the Swiss Society of Industrial Pharmacists. The potential industrial pharmacist should obtain, as a PhD student, additional skills, which are very important in his future job.

These skills include **leadership performance**, **social competence** and **how-to-do-research-in-an-efficient-way**.

Thus, the topic of the thesis is not necessarily the first priority. However, the company you will work for is happy if you do not need too much time for the "training on the job" and this can be essential as a competitive advantage if your competitors have no experience in the field they will work. The pharmaceutical industry likes open-minded people, who have knowledge of other cultures and who speak more than one language. To understand, speak and write English is mandatory for a job in the pharmaceutical industry, as the language of communication is English. In globally active companies, the reports and minutes are written in English.

If you know other languages - which may be essential - so much the better. You can obtain such a competence during a Postdoc stay in a foreign country.


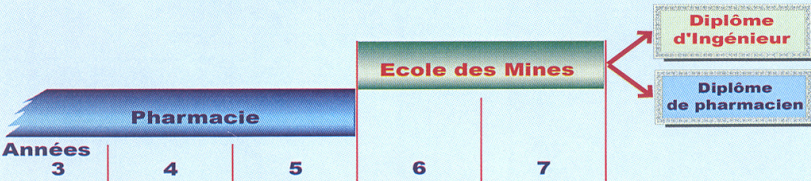

A former PhD student of mine, Dr. A. Tschirky, spent his Postdoc time in China, speaks now Mandarin and is head of R&D Roche (China). To become an open-minded globally active person, a stay abroad is a very fruitful experience. In this context, it is important that your time management is as good as possible. Starting a job, you should not be too old! Thus knowing very early what you want to do in future, is a great advantage.

If you want to work in industry, you should follow the track of an industrial pharmacy curriculum - which means an MSc in pharmaceutical sciences - and choose an interesting topic in

your master thesis, which could be the introduction to your PhD thesis, just to save time. It is essential that you are able to complete your PhD thesis within three years. The topic could be preferably in the area where the need for industrial pharmacists is the most important one (see below: job profile of the industrial pharmacist and the fields where the industrial pharmacist is working).

Why?

You have to keep in mind the following "natural law": An industrial pharmacist preferably hires an industrial pharmacist, a lawyer prefers to hire again a lawyer, a PhD in chemistry prefers to hire a PhD in chemistry etc. Thus, it is difficult to get a job in an environment, which is occupied by others even if your contribution would be excellent!

DEROULEMENT DE LA FORMATION		 Recrutements et diplômes Les étudiants sont recrutés sur titres après la 5 ^e année de Faculté de Pharmacie, dans les Facultés de Pharmacie partenaires (le réseau des partenaires est à géométrie variable et extensible).
		
Témoignage de partenaire universitaire : « L'Ecole des Mines d'Albi-Carmaux dispose du plus grand centre européen en technologie des poudres. 80% des formes pharmaceutiques utilisent ces technologies en développement comme en production. L'intérêt de cette double compétence de pharmacien et d'ingénieur n'est pas à démontrer. » Pr Dr Hans LEUENBERGER Directeur de l'Institut of Pharmaceutical Technology Université de Basel, Suisse Président, Swiss Association of Pharmaceutical Scientists	 Renseignements : Ecole des Mines d'Albi-Carmaux Campus Jarlard - Route de Teillet 81013 ALBI CT Cedex 09 Tél : 05 63 49 30 45 email : admissions@enstima.fr site : http://www.enstima.fr/	Pharmacien : Devenez ingénieur !

Instead of doing a PhD, there are other possibilities, which will become in future more important, such as a Master in Business Administration.

In addition, did you know that the social status of a degree as an Engineer (of a French Grand

École) in industry is in France much higher than a PhD?

Thus if you like to work and live in France, you should think to do a double diploma or double master, i.e. an MSc in Pharmaceutical Sciences (e.g. in Basel) and a Master in Engineering

Sciences at the (Grand) École des Mines Albi-Carmaux in France.

See www.sgphw.ch
 News / Veranstaltungen
 Leaflet to PharmaPoint Nr5.

General job profile of an industrial pharmacist

Below you find the mission of the industrial pharmacist and a general job description of a pharmacist working in industry. Please do not forget the most important point: Choose your career, tracking that field, you love best!

Mission

The industrial pharmacist is in charge of handling multi-disciplinary tasks such as dosage form design, pharmaceutical processes, analytical methods, biopharmaceutical, quality, patent and regulatory aspects of the development and manufacturing of innovative medicinal products in order to successfully introduce them on the market in an efficient way cov-

ering a broad range of job opportunities (see figure below).

Key activities

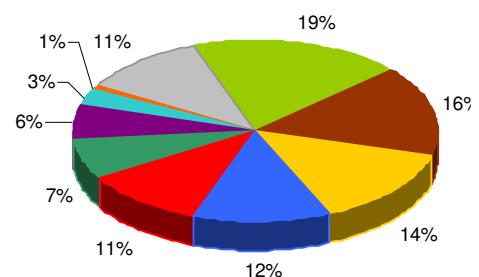
1. To translate pharmaceutical knowledge into a practical solution (drug formulation) satisfying therapeutic goal (administration modality), and needs of the market (innovation).
2. Develop and evaluate robust processes/methods (formulation, analytical, administrative) for new formulation and transfer them to the production (from small to large-scale production).
3. Manufacture clinical service forms/market forms with the required quality, timeline and cost effectiveness in or-

der to satisfy the client needs.

4. Use validated analytical methods allowing monitoring the manufactures, clinical or market forms.
5. Evaluate and purchase instruments, equipment and material in order to be able to fulfil the processes and economical goals.
6. To get alignment of the team members on formulation strategies and to inform decision makers in order to mobilise required resources.
7. To compare different scenarios (SWOT) for formulation development and production through registration.

Prof. Dr. Hans Leuenberger

Honorary Member of the Swiss Society of Industrial Pharmacists



Source: GSIA, Schweiz. Ges. der Industriephoteker
www.gsia.ch

Last-minute Reminder

Women Life Science Leadership European Congress
2007



Last reminder for your registration for the first “Women Life Science Leadership European Congress” on March 23 and March 24, 2007 in Basel. The idea of this congress was originally from SGPhW. We have a lot of people around the world interested in this congress. The registration of members from SGPhW is actually very low and I think you all have to take care, that we have more people presented at that congress to represent our organisation in this European environment.

The full program with all the workshop sessions and the registration is available online under: www.womenlifesciencecongress.com. Have a look and make you familiar with the great opportunity to meet important people and learn from them.



I am looking forward to seeing you at the congress.

Dr. Christine Moll for the Organizational committee

SGPhW General Assembly

14th General Assembly 2006

The 14th General Assembly took place on May 31, 2006 in Basel and stood in the light of the proposals concerning changes of the statutes as well as the composition of the senate. The accounts of 2005 were presented and accepted by the members.

The changes to the composition of the senate (art. 13 of the statutes) were presented and reformulated to

The senate consists of the senate committee, one delegated member of each member society and three delegated member of the individual members or their deputies.

This extension shall promote the integration of the member societies and support their interests more broadly.

Moreover, various powers and obligations of the senate shall

be transferred to the senate committee in order to relieve the senate and to enforce the activities of the senate committee.

These powers and obligations (art 14 of the statutes)

- b) *Discussion of the annual report.*
- c) *Examination of the annual account and the budget, as well as applications to the General Assembly concerning the annual fee.*
- d) *Monitoring of the use of funds by internal working groups.*
- f) *Preparation of the General Assembly.*

The two proposals were well noted by the members and will be presented for votes on the next General Assembly.

For his many years of activities, Dr. Bruno Galli was nominated

"Fellow of SGPhW", to which we congratulate cordially again.

The Vice-president Dr. C. Moll informed detailed over the already introduced campaigns connected with the "Women Life Science Leadership Congress", which will take place on March 23 & 24, 2007 in Basel, under the label of the SGPhW. The planning and execution was assigned by a mandate to Mrs. Sabine Welte, who takes over the complete responsibility for the success of the event. Both Dr. Christine Moll and Dr. Roger Schibli are part of the organisation committee.

The members congratulated Dr. Christine Moll to the advanced activities and accepted the assignment of the mandate with a minimum deficit guarantee from SGPhW.

15th General Assembly 2007

The 15th General Assembly will take place April 27, 2007 in the "House of the University" at the University of Bern.

It is organised in conjunction with the monthly PharmaLunch

and a presentation of Dr. Rudolf Brenneisen on the topic "Departement für Klinische Forschung der Universität Bern: Brücke zwischen Grundlagen- und klinischer Forschung".

We look forward to numerous participants to this "Central Swiss" event.

Advance announcements:

PharmaLunch, March 30



Safran Zunft, Basel

General Assembly, April 27



Haus der Universität, Bern