Event Summary

Panel:

- Professor Anna Nagurney (Department of Operations & Information Management)
- Professor Ana Muriel (Department of Mechanical & Industrial Engineering)
- Professor Senay Solak (Department of Operations & Information Management)
- Professor Hari Balasubramanian (Department of Mechanical & Industrial Engineering)
- Amir H. Masoumi (Ph.D. Candidate, Department of Operations & Information Management)

Professor Anna Nagurney talked about the importance of preparing for an academic career right through the graduate school. Based on her experience as an academic advisor to 17 PhDs - almost all of them pursuing an academic track - she pointed out the importance of the three dimensions that should get reflected on an applicant’s curriculum vitae (CV):

(I) Research (II) Teaching (III) Service

A professor contributes the university in many different ways and, hence, applicants need to show multi-tasking ability. Professor Nagurney spoke about the importance of publications and conference presentations to demonstrate the ability to produce high quality research. Conferences are an excellent chance to build an academic network with other scholars, as well as discuss and share research.

The experience as teaching assistant or associate in graduate school shows potential employers an inclination towards teaching. Moreover, since the candidate has prior hands-on experience in teaching and/or designing courses at undergraduate or graduate level, it gets established that essential groundwork has already done.

Service experience is also an important dimension for potential employers and colleagues. It shows the capability to handle administrative responsibilities, given a chance. As a PhD student, this skill can be developed by associating with significant professional societies and student chapters. Getting involved in the functioning, taking up critical positions, and justifying your presence successfully, would depict managerial and administrative skills.

Prof. Nagurney emphasized the fact that a good CV has the potential to open doors for interviews, whether in person, at conferences or telephonically. Preparations for on-site
interviews hold considerable importance in an academic job search. Applicants may be asked to present their research and/or teach a topic in their field. Energy, enthusiasm and essential communication skills are key attributes for campus visits which often last an entire day.

Professor Ana Muriel elaborated on the interview process in detail and spoke about her own experience. She highlighted that students in Industrial Engineering and Operations Management have the possibility to apply in Engineering and Business Schools, alike.

The campus visits, typically, last 1-2 days, and include research talks, presentations, as well as meetings with a faculty members who might test you on your expertise or might only want to assess you as a potential colleague. For the job talk, it is important to present previous research understandably for a variety of faculty members, while also briefly highlighting key research points in depths. The talk should highlight possible research directions and funding possibilities.

On the interview day, it is important to be prepared for various questions, elaborately talk about one’s research, at the same time be ready to briefly summarize oneself to the evaluators. In addition, Professor Muriel emphasized that the applicant should ask questions regarding teaching needs, typical service loads and general expectations, thereby, exhibiting proper and genuine interest in the organization. Other questions may refer to students’ funding, school resources, job details (tenure, promotion, past and future needs, etc.) and benefits.

Interpersonal skills (e.g. eye contact, being positive, adapt and relate, and so on) are important for a successful interview process.

Professor Solak spoke about the time line of an application process and also provided his own experience. He pointed out that preparation and timing are extremely important. The preparation should start by the summer of the year before graduation. It is important that students start building the application package which, typically, includes a teaching and research statement, cover letter and CV. Each application package should specifically be customized to match the position and requirements of each university.
The cover letter is essential and important since it explains the interest in the position, the previous experiences and must mention an applicant’s specific plan for future projects, collaborations and research topics.

Vacancies start to get released by as early as summer each year, much before the INFORMS conference in fall. It is important to focus on every step of the interview process, since schools are only able to invite 5-6 applicants for campus visits from a very high number of applicants. Applicants must plan, stay prompt, and remain on schedule all through the application process.

Prof. Balasubramanian pointed out the sources of academic job postings and shared his own experience of doing a Postdoc at Mayo Clinic.

He mentioned that in finding openings, it is important to keep an eye on several mailing lists and websites. This could be the Industrial Engineering faculty mailing lists, INFORMS/MSOM mailing lists and websites, IIE mailing list, etc.

Instead of pursuing academics right after the PhD, a candidate could also consider postdoctoral opportunities. This, especially, helps when a candidate does not get an offer of his/her choice. Postdoctoral position might serve as a good transitionary phase. It could render a chance to develop interests, improve one’s ability in research, and produce independent research, while moving away from the PhD advisor’s umbrella and create one’s own research identity. The latter is often appreciated in academics. The postdoctoral stint might allow time to publish and explore different research areas as well as develop academic contacts and network, in order to be better prepared for an assistant professor position.

Prof. Balasubramanian also pointed out that industry internships could be another area to explore while waiting for your dream academic position. The research done through your PhD could be applied to industry. This could help gain a practical viewpoint on your research and observe the actual execution related problems in industry. The experience could also be utilized as a way to think about ways to bridge the gap between academia and industry, often a motivation for empirical research.
Amir Masoumi spoke about his recent experiences and observations in the academic job market. He found 180+ job openings out of which only 19 were in Industrial Engineering departments and 20+ were specifically looking for a health care background. Most openings he found were posted in August and September and came from universities along the East Coast as well as the Mid West. Amir highlighted various key words he used in his search before describing the application steps and the documents he prepared. He mentioned that it is important to be organized through the process, and one must respond quickly to application feedback and invitations. Amir ended his talk with giving various personal experiences in his application process.

The discussing ended on a collective note that academia is a highly lucrative career to pursue. The professors agreed that the amount of flexibility, intellectual stimulation, and independence in work offered by an academic position is unparalleled.