

# **Empowering the Cosmos: Women's dynamic role in shaping the space sector and the contribution of education and mentorship programmes**



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# Human Space Exploration Moon & Mars

**Which radiation & impact**  
Space radiation dosimetry

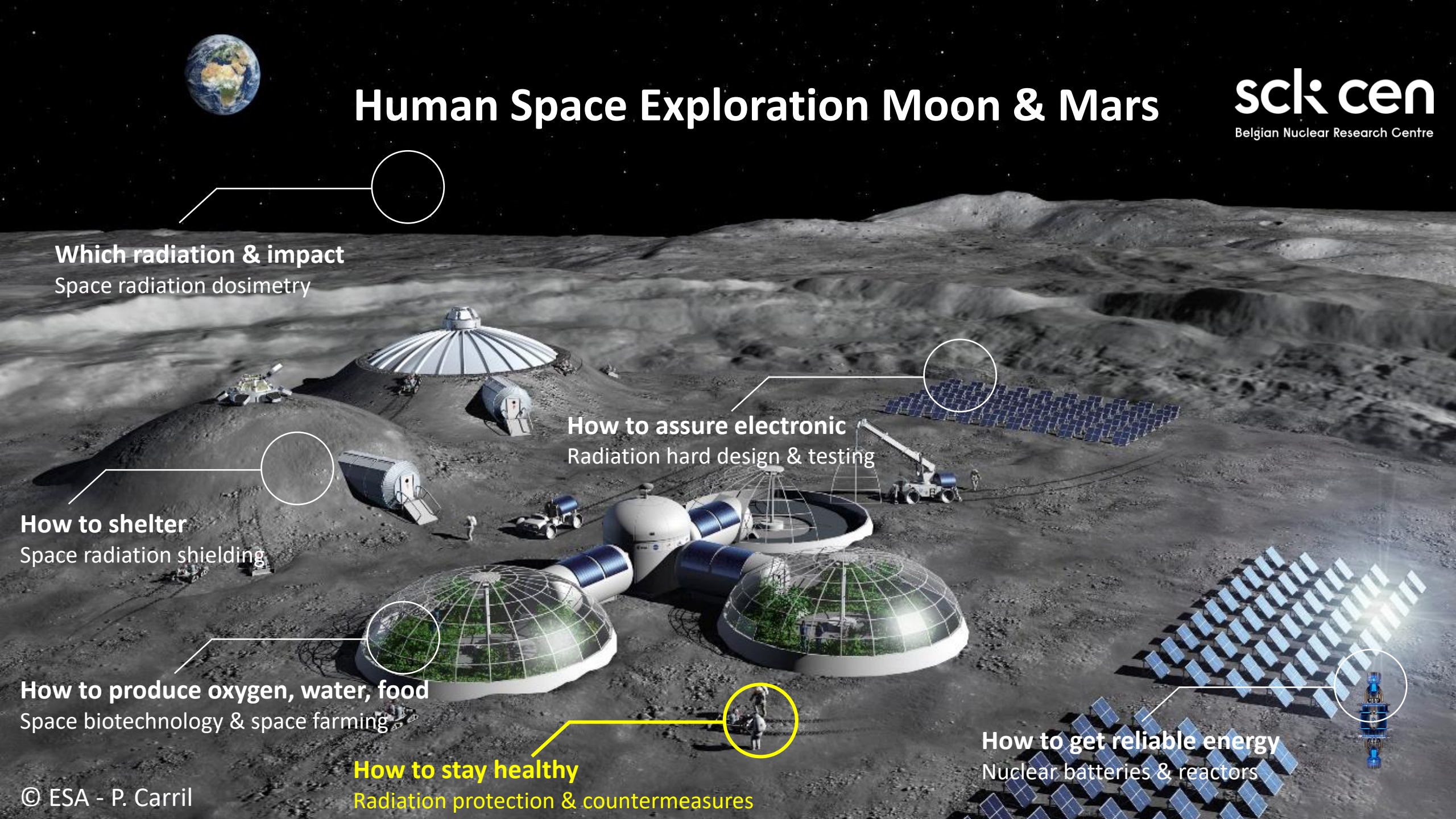
**How to assure electronic**  
Radiation hard design & testing

**How to shelter**  
Space radiation shielding

**How to produce oxygen, water, food**  
Space biotechnology & space farming

**How to stay healthy**  
Radiation protection & countermeasures

**How to get reliable energy**  
Nuclear batteries & reactors





# Sarah Baatout, SCK CEN, Mol, Belgium

- Am fascinated by understanding and curing diseases
- In space, the human body is extremely challenged
- Strong sense of purpose of my research for the community and for improving healthcare in space and on earth
- Radiotherapy, pharmaceuticals development, space research are hot topics
- Interest in using my creativity to develop new research ideas, new tools or new protocols to help community
- Interest in performing research in different environments, countries & develop international networks
- Love teaching/coaching and mentoring younger fellows
- Interest in publishing/protecting my research
- Being critical, I like challenging assignments and opportunities

• **All that is possible in the space sector**

**sck cen**



# The space sector



- 1. How to promote diversity, inclusion, mentorship and networking
- 2. Ongoing efforts to bridge gender gaps and promote equal representation
- 3. Potential impact of gender related health issues when working in space

## Promoting Diversity, Inclusion, Mentorship and Networking

- Importance of fostering diversity and inclusion in space sector
- Highlight initiatives and programs aimed at encouraging women to enter and thrive in the field
- European Space Agency (YGT, summer schools, courses)
- Association for Women in Space
- European Association of Women in Space
  
- Local and International Conferences and Workshops on space
- On line communities and Forum
- Grants and Scholarships

# Ongoing Efforts to Bridge Gender Gaps and Promote Equal Representation

- **European Commission President** Gender equality as a major theme and objective (2019-2024).
- **European Commission's** Gender Equality Strategy 2020-2025 to address gender gaps and promote gender equality in all areas of life (work-life, economic empowerment, gender-based violence ...)
- **Horizon Europe** Gender Equality Plans (GEPs), requires research organizations to develop and implement GEPs to promote gender balance in research teams, leadership positions, and other aspects of research culture.
- **Equality Bodies**, established institutions by EU such as the European Institute for Gender Equality (EIGE), to monitor and promote equality in areas such as employment, education, and healthcare.
- **European Parliament** has a standing committee on Women's Rights and Gender Equality (FEMM).

## Potential Impact of Gender Related Health Issues

- Importance of “gender-specific medicine” -> Health research and health policy need to adequately explore and address the combination of social and biological sources of differences in women’s and men’s health.
- WHO’s Sustainable Development Goal (SDG) 3 “Ensuring health and well-being for all at all ages” cannot be achieved without addressing the specific barriers and challenges faced by women, men, girls, boys and gender diverse people.
- Medical Surveillance, Personal Protective Equipment (PPE)
- Reproductive Health, Radiation Sensitivity, Cancer Risk
- Training and Education, Reporting and Support
- Research and Data Collection
- Inclusivity and Diversity
- Addressing these points can contribute to a safer and more equitable work environment when working in space sector considering the potential impacts of gender-related health issues.



# My message to You



- Look for good mentors/supervisors who can advise you wisely.
- Don't be afraid to contact known people for advice, for feedback. Don't stay in your bubble, don't be shy
- Make publicity for yourself (future employers, people who select you for trainings and courses, who nominate you for prizes, organizers of conferences, need to find you) : create a linkedin profile, connect with known people in your field of interest, google scholar, research gate, ...)
- Participate in competitions for prizes, awards.
- When receiving a task/homework, go the extra mile. Don't just do the bare minimum.
- Organise your days/weeks in advance to not start at the last minute.
- To be able to avoid procrastination, you need to face your fears. The earlier you learn, the better.
- Show leadership and initiative and make the difference: start a journal club
- Care for others and for your team, be a team player, give to others and they will give you back





