

### University of Zagreb

Faculty of Food Technology and Biotechnology
Department of Biochemical Engineering
Laboratory for Antibiotic, Enzyme, Probiotic
and Starter Cultures Technology



## ALIGNING EXPECTATIONS AND GUIDING DOABLE DOCTORAL WORK PLAN



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ERASMUS+ project "Harmonization and Innovation in PhD Study Programs for Plant Health in Sustainable Agriculture –HarlSA" February 5<sup>th</sup>, 12<sup>th</sup>, 19<sup>th</sup> and 26<sup>th</sup>, 2021

#### MENTORING RELATIONSHIP DEFINITION

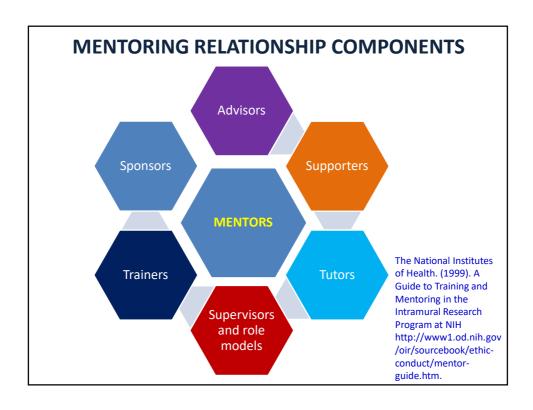
"Nurturing process in which a more skilled or experienced person, serving as a role model, teaches, sponsors, encourages, counsels and befriends a less skilled or less experienced person"

(Anderson & Shannon, 1988)

- the word "mentor" comes from The Odyssey by the Greek poet Homer
- very important in higher education
- trusted relationship

Anderson, E., & Shannon, A. (1988). Toward a conceptualization of mentoring. Journal of Teacher Education, 39(1), 38-42.

http://blogs.nature.com/naturejobs/201 6/08/26/you-need-a-mentor-or-three/



### **MENTOR GUIDING PRINCIPLES**

- Strive for mutual benefits
- Agree on confidentiality
- **■** Commit to honesty
- Listen and learn
- Build a working partnership
- Lead by example
- Be flexible

William Hogue and Ernest Pringle, University of South Carolina Over the course of your life's journey, you will have many mentors, each serving a purpose to move you forward in your career or other ambitions.



https://peppertt.com/blog/10-lessons-learnt-in-10-years-in-business-in-tt/

#### **SUCCESS!**

- Getting to know your PhD student.
- Meet on a regular basis.
- · Keep focused on goals.
- Follow through tasks of your PhD student.
- · Be open to learning.
- · Periodically reflect on what each of you is learning.
- · Commitment to reach goals.
- · Provide regular feedback.
- Make corrections step by step.
- Make discussions with whole research team about PhD student work plan realisation.

SIGUCCS advisory team: B. Allen D. Herrick, K. McRitchie D. Pfeiffer, B. Rugg, C. Vucinich, M. Zocher)

#### **REGULAR MEETINGS**

- · topics and questions for PhD student
- summary of what you've accomplished since the last meeting
- notes from previous meetings
- · upcoming deadlines



https://bizmatrix.com.au/

mentor-importance-one/

Adapted from https://sph.umd.edu

https://www.apa.org/monitor/2019/04/mentor-ethically

#### ASSISTANCE TO PhD STUDENT

- shape PhD Thesis work plan
- discuss your research field
- recommend publications
- guide PhD Thesis work plan
- think about the ethical implications
- select members of dissertation/research project committee
- shape research/grant proposal, presentations and manuscript preparation

Adapted from https://sph.umd.edu

http://stephenconroycoaching.com/in

dex.php/mentoring/

#### **DISSERTATION WRITING**

- insist on carefully written, well-edited and proofread dissertation draft
- deadline for submitting dissertation draft and for your reading
- encourage PhD student to well-reasoned response if disagrees with any of your comments
- insist on mark of the new or edited sections so that you will not always have to read the entire document

Adapted from https://sph.umd.edu



https://www.sciencemag.org/careers/2015/10/power-mentoring

### CAREER AND PROFESSIONAL DEVELOPMENT

- information and guidance
- discussion
- introduction to colleagues, potential employers, and other professionals
- encouragement for presentations and networking
- nomination for fellowships
- help in developement of interviewing skills, job offers, negotiation for first contract
- continue to offer professional advices



https://emottawablog.com/2018/11/the -unwritten-rules-of-mentorship/

Adapted from https://sph.umd.edu

### **DEVELOPING TEACHING SKILLS (optional)**

- teaching-oriented opportunities
- · share your syllabi and assignments
- evaluate his/her progress and set future teaching goals
- encourage and recognize different learning styles



http://www.digitalcounterrevolution.co.uk/2013/ken-robinson-caricature-teacher-education-paradigms-or-changing-caricatures/

Adapted from https://sph.umd.edu

### **MENTORING AGREEMENT**

### - basic information -

This agreement outlines the goals and expectations agreed upon by the mentor and mentee listed below. Although the thoughtful completion of this form is a requirement, it is understood that items will change and adjust naturally to fit the needs of both parties as the mentoring relationship grows. Current plans are to revisit this document every \_\_\_\_\_\_ (months) to adjust goals and dates given current accomplishments. If at any time during the duration of the mentoring contract one member of the mentoring pair does not feel like the other is able or willing to fulfill the items agreed to above, please contact \_\_\_\_\_\_.

# MENTORING REVISION PLAN: PLANNED UPDATE ACTUAL UPDATE MENTEE SIGNATURE MENTOR SIGNATURE MM/DD/YYYY MM/DD/YYYY

MEETINGS (frequency) and CONTACT SCHEDULE

From UNSW Sydney: Mentoring Plan Template https://mhdi.unl.edu/Mentoring%20Plan%20MHDI.pdf

### - career goals -

- I. LONG TERM CAREER STATEMENT (1 2 Paragraphs):
- II. SHORT TERM CAREER GOALS (3 4 Sentences):

**One Year Goal:** 

**Three Year Goal:** 

**Five Year Goal:** 

- III. CURRENT RESEARCH (Significance, Innovation, Approach, Broader Impact):
- IV. FUTURE RESEARCH (Significance, Innovation, Approach, Broader Impact):

From UNSW Sydney: Mentoring Plan Template https://mhdi.unl.edu/Mentoring%20Plan%20MHDI.pdf

### **MENTORING AGREEMENT**

### - long-term skills / career development plan -

ACTIVITY	ACQUISITION PLAN (date)
experimental skills development	
statistical analyses skills developement	
experimental results presentation	
preparing a poster and oral presentation	
writing a scientific paper	
social connections and meetings with other scientific teams	
teaching	
conference atendance	
professional trainings, workshops	
grant submissions and funding opportunities	
building collaborations	
leadership developement	
	https://mhdi.unl.edu/Mentoring%20Plan%20MHDI

### **MENTORING AGREEMENT**

### - evaluation -

ANNUAL MENTOR'S REPORT ON THE DOCTORAL CANDIDATE'S PROGRESS	Y/N; comments
The doctoral candidate comes to conferences well-prepared	
Planning and realization of annual research activities and professional training	
Progress in mastering of methodology of scientific research	
Writing and publication of scientific/scholarly works	
Doctoral candidate's overall attitude to the study programme	

 $Adapted\ from\ http://www.unizg.hr/istrazivanje/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr$ 

### MENTORING AGREEMENT - evaluation -

ANNUAL PROGRESS REPORT OF THE DOCTORAL CANDIDATE (Self-Assessment)	Y/N; comments
Are you making progress according to the work plan?	
Are you making progress since last report?	
Are you satisfied with the quality of your research progress?	
Are you satisfied with the overall quality of your work?	
Did you realized and are you satisfied with courses taken, workshops attended and professional trainings domestic or abroad?	
Did you realized and are you satisfied with your participation in scientific and professional conferences?	
Did you present or publish results of your scientific work?	

Adapted from http://www.unizg.hr/istrazivanje/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/

### MENTORING AGREEMENT - evaluation -

ANNUAL MENTOR EVALUATION BY PhD STUDENT	Y/N; comments
Clear articulation of research goals for and expectations from the doctoral candidate	
Help in planning annual research activities and professional trainings	
Mentor works with doctoral candidate on a regular basis	
Encouragement to publish, and help in publishing scientific/scholarly works	
Mentor's overall relationship with the	

 $Adapted\ from\ http://www.unizg.hr/istrazivanje/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/doktorski-studiji/obrasci-dr-sc-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-art/scientific-areas-dr-sc-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scientific-areas-dr-art/scienti$ 

### MENTORING AGREEMENT

#### - evaluation -

ANNUAL MENTOR EVALUATION BY PhD STUDENT	Possible answer options:	
Did your mentor make him/herself available to you?		
Did your mentor respond to you in a timely fashion?	- all of the time	
Did your mentor address your concerns?	a awaat daal af	
Was your mentor flexible?	- a great deal of	
Did you mentor treat you in collegial fashion?	the time	
Did your mentor treat you respectfully?	- a moderate	
Was your mentor well organized?	- a moderate	
Was your mentor well prepared?  Did your mentor realistically conceptualize the mentoring	amount of the	
experience?	time	
Did your mentor direct you to appropriate reading material?	- not very often	
Did your mentor direct you to appropriate professionals?	,	
Did your mentor direct you to appropriate workshops?	- never	
Do you believe your mentor provided a positive learning		
experience?		
From UNSW Sydney: Mentoring Plan Template https://mhdi.unl.edu/Mentoring%20Plan%20MHDI.pdf		

### APPROVAL OF THE DISSERTATION TOPIC - procedure -

#### Forms dr. sc. University of Zagreb, Croatia

Form dr. sc. - 01 - Request for Approval of the Dissertation Topic

Form dr. sc. - 02 - Evaluation of the Dissertation Topic

Form dr. sc. - 03 - Decision on Approval of the Dissertation Topic

Form dr. sc. - 04 - Annual Progress Report of the Doctoral Candidate

Form dr. sc. - 05 - Annual Mentors's Report

Form dr. sc. - 06 - Request for Change of the Topic and/or Mentor

Form dr. sc. - 07 - Request for Postponement of the Public Defence of the

Dissertation

Form dr. sc. - 08 - Dissertation Layout Guidelines

Form dr. sc. - 08 - Dissertation Layout Guidelines (International Dual Doctorates)

Form dr. sc. - 09 - Annual Work Report on the Doctoral Study Programme

Form dr. sc. - 10 - Report on Dissertation Evaluation

Form dr. sc. - 11 - Minutes of the Dissertation Defence

http://www.unizg.hr/istrazivanje/doktorski-studiji/obrasci-dr-sc-dr-art/scientific-areas-dr-sc/

The mentoring formality may end, but a new type of relationship begins...

Often you have gained a lifelong professional colleague whom you can continue to share experiences and advices.

### Doctoral students financial support through projects and grants

- Croatian Science Foundation research project "Potential therapeutic biomolecules of next-generation probiotics" HRZZ IP-2019-04; 2019-2023; Project leader: Prof. Blaženka Kos, PhD
- Croatian Science Foundation research project "Probiotics and starter cultures surface proteins and bacteriocins"HRZZ IP-2014-09-7009; 2015-2019; Project leader: Prof. Blaženka Kos, PhD
- Support of University of Zagreb (2015-2020) Projects leader: Prof. Jagoda Šušković, PhD)
- FEMS Research and Training Award "Isolation and characterisation of exopolysaccharides from selected autochthonous *Lactobacillus* strain" for Katarina Zorić, FEMS-GO-2017-004, Department of Life Sciences, University of Trieste, under the supervision of dr. sc. Paola Cescutti)



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