



CURRICULUM VITAE

Ahmed Helal, MSc, PhD

SUMMARY SHEET

Name: Ahmed Mohamed Ibrahim Helal

Current Employment: Assistant Professor, Food and Dairy Science and Technology Dept., Faculty of Agricultural, Damanhour University, Egypt

Educational Background:

Ph.D., Food technology and biotechnology (Nutrition Biochemistry), University of Modena and Reggio Emilia, Italy, 2013

ACADEMIC ACHIEVEMENTS	NUMBER
TEACHING	
Undergraduate Courses Taught	12
Postgraduate Courses Taught	8
STUDENTS SUPERVISION	
Undergraduate Graduation Projects Supervised	71
MSc Projects Supervised as a Principal Academic Supervisor	3
MSc Projects Co-Supervised as a Thesis Committee Member	2
RESEARCH GRANTS	
Research Grants as a Principal Investigator	1
SCHOLAR ACHEIVEMENTS	
Articles Published in Peer-Reviewed Journals	14
Conferences Proceedings	13
Books Authored	1
Referee/Reviewed for International Journal Papers	6
Editorial Board Services	2
CONFERENCES & WORKSHOPS PARTICIPATION	
National workshops Participation in Egypt, as an Invited Speaker	5
National Conferences Participation in Egypt, as an Invited Speaker	6
Chairing and Organizing National Workshops in Egypt	5
International workshop, poster and oral presentation	6
International Conferences Participation, oral or poster	5
Citation	
International Citation	104
ResearchGate score	18.91
Google scholar index	6
Scopus <i>h</i> - index	6
Language skills	
English	Fluent (spoken and written)
Italian	Very Good
French	Medium

PERSONAL INFORMATION

Name: Ahmed M I Helal

Date of Birth: March 4th, 1981

Marital Status: Married with two children

Employment Address: Food and Dairy Science and Technology Department

P.O. Box, 22116, Damanhour

Faculty of Agricultural

Damanhour University, Egypt

Tel No.: (Office):0020453318537 : (Cell):00201002908422

Email: ahmed.helal@damanhour.edu.eg

EDUCATION

Bachelor: Food and Dairy Science, Faculty of Agriculture, Alexandria University, Egypt, 2002

Masters Degrees: Master of Science (MSc) Food and Dairy Science, Faculty of Agriculture, Alexandria University, Egypt, 2007

Doctorate Degree: Doctor of Philosophy (PhD), Food Technology and Biotechnology (Nutrition Biochemistry), University of Modena and Reggio Emilia, Italy, 2013

EMPLOYMENT RECORD

- September, 2018 to present: Associate Professor, Faculty of Agriculture, Damanhur University, Egypt.
- July, 2013 to August 2018: Assistant Professor (lecturer), Faculty of Agriculture, Damanhur University, Egypt.
- February, 2014 to May, 2014: Postdoctoral Research Fellow, University of Modena and Reggio Emilia, Italy.
- Mar, 2007 to June 2013 : Assistant Lecturer at Department of Food and Dairy Science and Technology, Faculty of Agriculture, Damanhur, Alexandria University, Egypt
- Jan 2003 to Mar, 2007 : Research Assistant (Demonstrator at Department of Food and Dairy Science and Technology, Faculty of Agriculture, Damanhur, Alexandria University, Egypt

Mission Abroad

- February, 2014 to May, 2014: Postdoctoral Research Fellow, University of Modena and Reggio Emilia, **Italy**.
- March 2013 to April 2013: Postdoctoral Research Fellow, University of Modena and Reggio Emilia, **Italy**
- September, 2010 to March, 2011: Visiting Ph.D. student at LIBio, Institut National Polytechnique de Lorraine (INPL), Universite de Lorraine, Vandoeuvre. **France**
- March 2010 to December 2012: PhD Scholar in University of Modena and Reggio Emilia, **Italy**

Recent projects and scientific interest

1- Production of antioxidant and antihypertensive peptides during camel milk fermentation by Lactobacillus strains.

Project in progress in collaboration with University of Modena and Reggio Emilia, Italy (project no 25531)

Abstract:

Milk proteins, especially caseins, are the main precursors of biologically active peptides. They contain encrypted in their primary structure bioactive peptides, which can be released by enzymatic hydrolysis consequently to their gastro-intestinal (GI) transit or during food processing. Depending on the amino acid sequence, the milk-derived peptides may exert a number of different activities *in vitro* and/or *in vivo*, such as immuno-modulation, anticancer action, hypocholesterolemic effect, as well as antimicrobial, mineral-binding, opioid, and peptidase inhibition activities. The antihypertensive and antioxidant peptides are main bioactive peptides identified in milk protein hydrolysates and fermented dairy products. Lacto-tripeptide valine-proline-proline (VPP) and isoleucine-proline-proline (IPP) have been shown to reduce systolic blood pressure both *in vivo* and *in vitro*. The mechanisms are not completely understood, but they may rely on the inhibition of angiotensin-converting enzyme (ACE), production of vasodilators, or modulation of sympathetic nervous activity .

This study will carry out to explore the potential of strains belonging to *Lactobacillus casei* group isolated from various sources, previously assessed for their probiotic aptitude to release peptides with biological activity during camel milk fermentation.

For these purposes, we will screen the performance of these strains during camel milk fermentation with regards to proteolytic activity and the release of bioactive peptides with antioxidant (free radical scavenging activity) and ACE-inhibitory activity, with a special focus on the production of VPP and IPP.

2-Post-doc mission (University of Modena and Reggio Emilia, Italy)

Title: Identification of bioactive peptides in camel, cow, sheep and goat milk during *in vitro* digestion.

- **The output :** Tagliazucchi, D, Shamsia, S.M, Martini, S, **Helal. A**, Conte. (2018) Biological activities and peptidomic profile of *in vitro*-digested cow, camel, goat and sheep milks, International Dairy Journal, 81 (2018) 19-27

SOCIETIES MEMBERSHIPS

- Member of the Biochemical society (U.K.)
- Member of Society of Free Radical Research- Europe
- Member of the Society for Dairy Technology (U.K.).
- Member of Egyptian dairy society (Egypt)
- Member of Egyptian food safety society (Egypt)
- Official trainer at Arab union of Sustainable Development and Environment
- Development Adviser of the Egyptian Enterprise Development Projects (EEDP) funded by the Canadian International Development Agency.
- Member of the Editorial Board of International Journal of Agriculture, Environment and Biotechnology (IJAEB)

ADMINISTRATION

University level:

- 2016- present: Official establishment of dairy production unit
- 2015- present: Advisor to the Higher Sports Committee of the University Students Union
- 2015-present: Nutrition supervisor in university activities and camps
- 2015- present: supervisor of Agriculture Education Department, Faculty of Education

College Level:

- 2017-present: General Coordinator of Student activities.
- 2015-2018: Member, Community Service and Environmental development committee
- 2017-present: Responsible and organizer of the cultural season activity
- 2017- present: Coordinator, faculty news on social media and website
- 2016-2017: Member, committee for quality and development
- 2015-presnt: Coordinator, second level student summer training
- 2014-2015 present: Advisor to the Sports Committee of the faculty Students Union
- 2013-2014: Member, Education and Student Affairs committee.

Department Level:

- 2016-2017: Secretary of the Department board
- 2015-Present: Organize, department scientific activates and workshops
- 2014-Present: Responsible, agreements and collaboration with private companies and factories
- 2014-Present: coordinator, student summer training
- 2013-Present: Member, Department board

INTERNATIONAL COLLABORATION

Prof. Stefane Desobry
Laboratoire d'Ingénierie des Biomolécules (LIBio)
Université de Lorraine, France
E-mail: Stephane.Desobry@univ-lorraine.fr

Prof. Andrea Antonelli
Professor of food chemistry, department of life Science
University of Modena and Reggio Emilia, Italy
E-mail: andrea.antonelli@unimore.it

Prof. Angela Conte
Professor of Biochemistry, department of life Science,
University of Modena and Reggio Emilia, Italy
E-mail: angela.conte@unimore.it

Prof. Davide Tagliazucchi
Associate professor of Biochemistry, department of life Science,
University of Modena and Reggio Emilia, Italy
E-mail: davide.tagliazucchi@unimore.it

Dr Tikam chand dakal
Assistant Professor, Department of Biotechnology
Manipal University Jaipur, Jaipur, India
E-mail: tikam260707@gmail.com

Dr Tareq alnemr
Professor, Faculty of Agriculture and Food Science
King Faisal University, KSA
E-mail: Talnemr@kfu.edu.sa

Dr. Alya Arabi
Assistant Professor, Department of Life and Environmental Sciences
Zayed University, Abu Dhabi, UAE
E-mail: Alya.Arab@zu.ac.ae

Dr. Emmanuel Panyoo
Researcher, Department of Food Science,
University of Pretoria, South Africa
E-mail: Panyoo.emmanuel@up.ca.za

List of publication

Books Authored:

Helal, A. *Mozzarella Cheese as Functional Food*, Saarbrücken, Germany, LAP LAMBERT Academic Publishing (2012), 181 page, ISBN: 978-3-659-29770-0

Articles Published in Peer-Reviewed Journals

1. Tagliazucchi, D, Shamsia, S.M, Martini, S, **Helal, A**, Conte. (2018) Biological activities and peptidomic profile of in vitro-digested cow, camel, goat and sheep milks, *International Dairy Journal*, 81 (2018) 19-27
2. **Helal A**, Rashid NN, Dyab NE, Otaibi MA, Alnemr TM. Enhanced Functional, Sensory, Microbial and Texture Properties of Low-Fat Set Yogurt Supplemented with High-Density Inulin. *J Food Processing & Beverages*. 2018;6(1): 11.
3. AL-Aswad S , **Helal A** , Shamsia S. M. and Awad S (2018) Quality and Rheological Properties of Bio Yoghurt Enriched with Pomegranate Juice, *Egyptian Journal of Dairy Science* , 46(2) (June 2018)
4. **Helal, A** and Tagliazucchi, D (2018) Impact of in-vitro gastro-pancreatic digestion on polyphenols and cinnamaldehyde bioaccessibility and antioxidant activity in stirred cinnamon-fortified yogurt. *LWT Volume 89*, Pages 164-170.
5. Tagliazucchi, D, Shamsia, S.M, **Helal, A**, Conte. A (2017) Angiotensin-converting enzyme inhibitory peptides from goats' milk released by in vitro gastro-intestinal digestion, *International Dairy Journal Volume 71*, Pages 6–16
6. Alnemr. T, **Helal, A**, Hassan. A, Elsaadany. K (2016) Utilizing the Functions of Hydrocolloids as Fat Mimetic to Enhance the Properties of Low-fat Domiati Cheese, *J Food Process Technol* 7:637. doi: 10.4172/2157-7110.1000637
7. Tagliazucchi, D, **Helal, A**, Verzelloni, E, Conte. A (2016) Composition and properties of peptides that survive standardised in vitro gastro-pancreatic digestion of bovine milk, *International dairy journal*, DOI: 10.1016/j.idairyj.2016.06.002
8. Tagliazucchi, D, **Helal, A**, Verzelloni, E, Conte. A (2016) Bovine milk antioxidant properties: effect of in vitro digestion and identification of antioxidant compounds, *Dairy Science and Technology* · DOI: 10.1007/s13594-016-0294-1
9. **Helal, A.**, Tagliazucchi, D., Verzelloni,E., Conte, A (2015) : Gastro-pancreatic release of phenolic compounds incorporated in a polyphenols-enriched cheese-curd, *LWT - Food Science and Technology*, Volume 60, Issue 2, Pages 957–963
10. **Helal,A.** Desobry,S., Banon, S., and Shamsia, S.M. (2015) Antioxidant activity and bioaccessibility of phenols-enriched edible casein/caseinate coatings during in vitro digestion. *Journal of Dairy Research* . 10/2014; DOI: 10.1017/S0022029914000557

11. **Helal, A.,** Tagliacruzchi, D., Verzelloni,E., Conte, A (2014) Bioaccessibility of polyphenols and cinnamaldehyde in cinnamon beverages subjected to in vitro gastro-pancreatic digestion. *Journal of Functional Foods*; 7, 506-516
12. Tagliacruzchi, D., Verzelloni, E., **Helal, A.,** Conte, A., (2013). Effect of grape variety on the evolution of sugars, hydroxymethylfurfural, polyphenols and antioxidant activity during grape must cooking. *International Journal of Food Science & Technology*, Volume 48, Issue 4, pages 808–816, April 2013
13. Tagliacruzchi, D, **Helal. A,** Verzelloni, E, Conte. A (2012) - The Type and Concentration of Milk Increase the in Vitro Bioaccessibility of Coffee Chlorogenic Acids - *Journal of Agricultural and Food Chemistry* - 2012 Nov 7;60(44):11056-64.
14. **Helal, A.,** Tagliacruzchi, D., Conte, A., and Desobry, S.,2012. Antioxidant properties of polyphenols incorporated in casein/Na-caseinate films. *International Dairy Journal*, 25 (2012), pp. 10–15

Conferences and workshops Proceedings

- **Helal A.** (2016) Role of milk casein on bioaccessibil polyphenols recovery and antioxidant activity of stirred fortified yoghurt during in vitro digestion. In: Proceedings of the NIZO Dairy Conference - Asia Pacific - Singex, Singapore - 8 - 10 November 2016
- Shamsia, S. M.; Nassar, A. M.K. **and Helal A. (2015)** Use of Moring oliefera in the reduction of the blood cholesterol level, Conference Paper · August 2015, 4th International Conference and Exhibition on Occupational Health & Safety, At Toronto, Canada, Volume: volume 3, issue 4
- **Helal A.** and Alnemr M.T. (2015) impact of Synergistic food-gums system on yield and quality properties of Low fat pickled Domiati cheese. In: Proceedings of the 12th Asian Congress of Nutrition. n. volume 1 - P. 473 Yokohama, Japan, May 14-18, 2015.
- **Helal A;** Tagliacruzchi D; Verzelloni E, and Conte A (2013). Drink Coffee, with or without milk? Interaction of dairy ingredients with phytochemicals in popular beverages. . In: Proceedings of the first international conference “food and agriculture: new approaches” n. volume 1- p. 174, Cairo, Egypt December, 2-4, 2013.
- **Helal A;** Tagliacruzchi D; Verzelloni E, and Conte A (2013) Effect of cinnamon beverage formulations on the bioaccessibility of polyphenols and cinnamaldehyde during in vitro gastro-pancreatic digestion. In: Proceedings of *6th International Conference on Polyphenols and Health (ICPH)* - n. volume 1 – p. 70, Buenos Aires, Argentina ,October 16-19, 2013
- Verzelloni E., **Helal A,** Tagliacruzchi D, Conte A (2012) - Antioxidant activity of *in vitro* digested bovine milk (SIB - 56th National Meeting of the Italian Society of Biochemistry and Molecular Biology-Abstract Book - Società Italiana di Biochimica e Biologia Molecolare Chieti (ITA)) - n. volume 1 - pp. da 153 a 153
- **Helal A;** Tagliacruzchi D; Verzelloni E; Desobry S, and Conte A (2012) Casein-antioxidants interaction, nutritional effects and technological applications. In Proc.s of the SFRR-E/IUBMB Advanced School (Dietary factors and redox signaling), Spetses, (Greece), 24-30 September, 2012, pp. 26.
- **Helal A** (2012) Interaction of polyphenols with milk and casein: Nutritional effects and application studies. In Proc.s of the 17th Workshop on the Developments in the Italian

PhD Research on Food Science and Technology, University of Bologna, Cesena, (Italy), 19-21 September, 2012, pp. 81-84. ISBN: 9788865412244

- **Helal, A.** 2012. Casein-polyphenols interaction: from test tube to applied technology. In: proceedings of TWAS/BioVision Alexandria.Nxt 2012. Alexandria, (Egypt), 21-22 April 2012 pp. 74-75.
- **Helal, A.,** Tagliacruzchi, D., Conte, A., Desobry, S.,2012. Manufacturing of Antioxidant Packaging Na-Caseinate Edible Films. Accepted abstract in: proceedings of BioVision 2012. Alexandria, (Egypt), 22-26 April 2012 pp. 16.
- Tagliacruzchi, D., Verzelloni, E., **Helal, A.,** and Conte, A., 2011. Effect of cow milk on the in vitro bioaccessibility of coffee chlorogenic acids. In: Proceedings of first international congress on cocoa, coffee and tea, Novara, Italy, 13-16 September, pp. 322 - 325; ISBN:9788890336003
- **Helal, A.,** 2011. Observation of antioxidant activity of some polyphenols during storage with incorporation in Na-caseinate edible films. In: Proceedings of 16th Workshop on the Developments in the Italian PhD Research on Food Science, Technology and Biotechnology, Lodi, Italy, 21-23 September 2011, pp. 239-240; ISBN: 9788848127172
- **Helal, A.,** El-Ghanam, M., and Ziena, H. M., 2009. Effect of storage conditions on the rheological properties of Mozzarella cheese made from Cow's and Buffalo's milk with complete substitution of milk fats with vegetable oils. In Proc.s of Darwin's living legacy International conference on Evolution and Society, 14-16 November 2009, Alexandria, Egypt

Participation in recent conferences and workshops

- Workshop " Roundtable on Responsible Science" 28 - 29November 2017, at the Bibliotheca Alexandrina, Alexandria, Egypt.
- The role of food industries in renaissance of the national economy and increasing exports, organized by the Scientific Society Food Industries, November 2017, Faculty of Agriculture, Alexandria University, Egypt
- NIZO Dairy Conference ,8 - 10 November 2016, Asia Pacific - Singex, Singapore.,
Abstract and Poster presentation
- Organizing committee and **speaker** at the “Global Concepts of Scientific Research, 8-9 August 2016, Alexandria University, Egypt.
- The 1st Egyptian Leadership Institute, (sponsored by the U.S. National Academy of Sciences), Cairo, Egypt, May 14-17, 2016.
- The third work shop “New trends in dairy technology”, National research center, Cairo, Egypt, 13th, January 2016.
- Organizing committee and **speaker** at the “Awareness Workshop for Conducting Responsible Science” 6th January 2016, Alexandria University, Egypt.
- Organizing committee and **speaker** at the “Awareness Workshop for Conducting Responsible Science” 30 december2015 , Damanhour University, Egypt.
- Training of trainee program, Arab union of Sustainable Development and Environment, Cairo, Egypt, 27-28th December, 2015.
- Invited **speaker** in the Responsible Conduct of Research, National research center, Cairo, Egypt, 2-3 December 2015.

- The 12th Asian Congress of Nutrition (12th ACN), 14-18 May 2015 , Pacifico Yokohama, Japan. **Abstract and Poster presentation**
- The 1st Egyptian Teaching Responsible Science in Egypt Institute (sponsored by the U.S. National Academy of Sciences), Ain El Sokhna, Egypt , March 21-26, 2015.
- The first international conference “food and agriculture: new approaches”, Cairo, Egypt, December, 2-4, 2013. **Oral presentation**
- Biovision 2013 conference, 22-25 March 2013, Lyon, France. **Poster presentation**
- SFRR-E/IUBMB Advanced School Dietary factors and redox signaling , Spetses, (Greece), 24-30 September, 2012, **Poster presentation**
- XVII Workshop on the Developments in the Italian PhD Research on Food Science and Technology, University of Bologna, Cesena, (Italy), 19-21 September, 2012 **Abstract and Poster presentation**
- Biovision 2012 conference, 22-25 April 2012, Bibliotheca Alexandrina, Alexandria-Egypt. **Poster presentation**
- TWAS/NXT “Scientific Innovation in the Developing World: from Theory to Practice”. 21-22 April 2012, Bibliotheca Alexandrina, Egypt. **Poster presentation**
- Ph.D. workshop of Doctorate School in Agri-Food Sciences, Technologies And Bio-Technologies, 24th February 2012 Reggio Emilia, Italy **Poster presentation**
- XVI Workshop on the Developments in the Italian PhD Research on Food Science, Technology and Biotechnology – Sep 21-23, 2011 – Parco Tecnologico Padano, Lodi, Italy **Abstract and Poster presentation**
- First International Congress on Cocoa, Coffee and Tea. 13-16 Sep, 2011, Novara, Italy **Abstract**
- Ph.D. workshop of Doctorate School in Agri-Food Sciences, Technologies And Bio-Technologies, 17th February 2011 Reggio Emilia, Italy
- TWAS-ARO 6th Annual Meeting. Dec 22-23, 2010, Alexandria- Egypt.
- Darwin's living legacy International Conference on Evolution and Society, 14-16 Nov 14-16, 2009, Alexandria, Egypt. **Poster presentation**

PERSONAL DEVELOPMENT

2016: Training workshop : “leadership”, organized by national academy of science USA, cairo, Egypt , May 14- May 17 , 2016

2015: Training of trainee program (TOT) , Arab union of Sustainable Development and environment, Cairo, Egypt, December 27- December 28, 2015.

2015: Training workshop : “Responsible science”, organized by national academy of science USA, Ain El Sokhna, Egypt , March 21- March 26, 2015.

2014: Research Visit, project entitled “identification of bioactive peptides in dairy milk”. Northeastern University of Modena and Reggio Emilia, Italy February 1 – May1, 2014

2013: Training Course: " Research Ethics" organized by Damanhour University, FLDC, Damanhour Egypt.

2013: Training Course: " Strategic Planning" organized by Damanhour University, FLDC, Damanhour Egypt.

2013: Training Course: " Scientific Research Methods" organized by Damanhour University, FLDC, Damanhour Egypt.

2013: Training Course: " International Publishing of Scientific Research" organized by Damanhour University, FLDC, Damanhour Egypt.

2013: training course: new methods in chromatography " organized by department of life science, University of Modena and Reggio Emilia, Italy

2012: training course: " Scientific English " organized by department of life science, University of Modena and Reggio Emilia, Italy

2012: summer school, SFRR-E/IUBMB Advanced School Dietary factors and redox signaling , Spetses, (Greece), 24-30 September, 2012

2010: Research Visit, project entitled “production of Edible films from milk protein”. Lorriene University, Nancy, France, September 15, 2010 – march 15 , 2011

2007: Training Course: " effective presentation" organized by Alexandria University, FLDC, Alexandria Egypt.

2006: Training Course: " project procedures" organized by Alexandria University, FLDC, Alexandria Egypt.

2006: Training Course: " Legal and Financial Aspects in University Environment " organized by Alexandria University, FLDC, Alexandria Egypt.

2006: Training Course: " principle of scientific research " organized by Alexandria University, FLDC, Alexandria Egypt.

2006: Training Course: " effective learning" organized by Alexandria University, FLDC, Alexandria Egypt.

Job/Work skills

- High level of expertise in biochemical, biological and technological research.
- Using **active learning** methods in teaching procedures
- Strong commitment for teaching excellence and student advising
- Demonstrated personal commitment to, and achievement in, scholarly research and communication of that achievement to others.
- Commitment to writing grants applications.
- Ability to conceive and formulate relevant research hypotheses.
- Ability to translate relevant research hypotheses into carefully planned studies.
- Well-developed analytical and problem solving skills.
- Ability to priorities work and meet deadlines, while being flexible.
- Ability to innovate in research proposals and transfer it to applicable work.

TEACHING

A) Courses Taught:

Undergraduate courses

1. Principles of food and dairy technology
2. Principles of Biochemistry
3. Principles of human nutrition
4. Food safety sanitation
5. Food and Dairy quality control
6. Food and dairy packaging
7. Cheese technology
8. Dairy products technology
9. Sensory properties of food and dairy products
10. Dairy Chemistry and analysis
11. Food chemistry and analysis
12. Dried and condensed milk technology

Graduate courses

1. Milk in human nutrition
2. Advanced dairy analysis
3. Protein biochemistry
4. Carbohydrate biochemistry
5. New aspect of dairy technology
6. New aspects in food analysis
7. Functional foods
8. Food and dairy biotechnology

B) Courses Development:

1. Developing and restructuring the course contents of the graduate course " milk in human nutrition"
2. Developing and restructuring the course contents of the undergraduate course " food and dairy packaging"
3. Developing the curricula for student summer training.
4. Developing the curricula for new courses of continuous education program " three diplomas as new degree for non-specialist students"

C) Undergraduate Students Supervision:

I have supervised graduation projects for undergraduate student's as follow:

2017	3 graduation projects (21 students)
2016	2 graduation projects (20 students)
2015	3 graduation projects (22) students)
2014	1 graduation projects (8 students)

Other information

Driving Licence: B

Language skills

- Arabic : Native language
- English : fluent (spoken and written)
- Italian : Medium
- French : Medium

Hobbies and Avocation

- Photography and video editing
- Sports (football, jogging and camping)
- Works of charity and helping the community and disables

Computer and IT Skills

- Programs : Microsoft Office (Word, Excel, PowerPoint, Access), Endnote
- Technical : Hardware's and Software
- Statistical Analysis : Stat graphics, XLSTAT, SAS, SPSS

Interpersonal Skills

- Ability to collaborate with other researchers and function as part of a research team.
- Ability to direct and supervise support staff.
- Organizing a workshops and meetings.
- How to link the work with society demands.