MASTER IN MEDICINE



University of Minho School of Health Sciences

2015 - A SNAPSHOT ASSESSMENT OF THE ACADEMIC YEAR 2014/2015

UNIVERSITY OF MINHO School of Health Sciences Medical Education Unit

Foreword

This Snapshot presents a summary of the 2014/2015 edition of the original 6 year and of the alternative graduate entry tracks of the undergraduate medical degree of the School of Health Sciences of the University of Minho (ECS-UM). The Medical Education Unit (MEU) produces it as part of the internal processes of quality evaluation. The primary objective is that of contributing to the accountability before the general public, health care system and current and future students.

The annual Snapshot presents empirical data derived from Minho's Longitudinal Research Database and results from educational research. Permanent and systematic data gathering and organization by the MEU sustain it, which is also responsible for the considerations in the document.

This year's report highlights the graduation of the first cohort of students originating from the alternative track and presents empirical data that sustains the quality of Minho's innovative graduate entry program. As usual, the current snapshot includes student academic performance, student evaluations of the undergraduate medical degree (curricular units, faculty and clerkships) and a socio-demographic summary of the student cohort. Also included is an update of Minho's Longitudinal Study of medical education (ELECSUM) (appendix "Longitudinal Study in 1 page").

This Snapshot will be distributed to the School's External Advisory Committee, to faculty members and to the student body of the School of Health Sciences.

School of Health Sciences Medical Education Unit University of Minho

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1. STUDY PLAN

ALTERNATIVE TRACK

This was the fourth year in operation of the 4-year graduate entry track of ECS-UM's undergraduate medical degree. The alternative track was approved by the Portuguese Agency for Assessment and Accreditation of Higher Education (A3ES) and credits student's previous academic accomplishments with 120 ECTS corresponding to the initial 2 years of the 6 year program. In 2014/2015, there were 18 positions available for new students (15% of numerus clausus - Decreto-Lei nº40/2007 de 20 de Fevereiro).

Table 1: Study plan: Graduate entry track

	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS
1st year	CBB / SC-CSH / P / C	Various	60
		TOTAL	60
2nd year	CBB / SC-CSH / P / C	Various	60
		TOTAL	60
Ä	С	Introduction to Clinical Medicine	10,5
3rd year	CBB / P	Foundations of Medicine	45
3,	SC-CSH	Community Health, Human and Social Science	4,5
		TOTAL	60
		Degree in Medical Basic Sciences	180
4th year		The same as the original track	60
4th year		The same as the original track	60
5th year 4th year			
		TOTAL	60
		TOTAL The same as the original track	60
5th year		TOTAL The same as the original track TOTAL	60

ECTS - European Credit Transfer Units

C - Clinical; CBB -Biological and Biomedical Sciences;

 $\mbox{SC-CSH - Community Health, Human and Social Sciences; P-Pathology} \label{eq:community}$

ORIGINAL TRACK

This was the fifth edition of the original curricular plan implemented in the academic year 2010/2011. There were no changes to last year's program.

Table 2: Study plan: original track

	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS
	CBB	Introduction to the Medical Degree Course	4
	CBB	Molecules and Cells	24
	CBB	Functional and Organic Systems I	25
l⁴ year	SC-CSH	Training in a Health Centre	1
1 _z	SC-CSH	First Aid	1
	CBB/SC-CSH/P/C	Option Project I	4
	SC-CSH	Vertical Domains I	1
		TOTAL	60
	CBB	Functional and Organic Systems II	26
_	CBB	Functional and Organic Systems III	23
2 [™] year	SC-CSH	Family, Society and Health I	4
2	CBB/SC-CSH/P/C	Option Project II	6
	SC-CSH	Vertical Domains II	1
		TOTAL	60
	Р	Biopathology and Introduction to Therapeutics	43
_	SC-CSH	Introduction to Community Health	4
3 [⊲] year	С	Introduction to Clinical Medicine	10,5
က်	SC-CSH	Follow-up of a Family II	1,5
	SC-CSH	Vertical Domains III	1
		TOTAL	60
		Degree in Medical Basic Sciences	180
	SC-CSH	Health Centre Residency I	8
	C	Medicine I Residency	17
_	C	Maternal and Child Health Residency	17
4⁵ yea	С	Clinical Neurosciences	10
4	C/P/CBB	From the Clinic to Molecular Biology I	3
	CBB/SC-CSH/P/C	Option Projects III	4
	SC-CSH	Vertical Domains IV	1
		TOTAL	60
	SC-CSH	Health Centre Residency II	13
	C	Surgery Residency	18,5
ear	C	Medicine II Residency	16
5" year	С	Optional Residencies	8,5
ц,	C/P/CBB	From the Clinic to Molecular Biology II	3
	SC-CSH	Vertical Domains V	1
		TOTAL	60
	SC-CSH	Health Centre Residency III - Final Training	10,5
ar	С	Hospital Residencies – Final Training	39,5
6 [≞] year	C/P/CBB	From the Clinic to Molecular Biology III	3
ٯ	CBB/SC-CSH/P/C	Option Projects - Final Training	7
		TOTAL	60
		Integrated Master Program in Medicine	360

ECTS – European Credit Transfer Units

C-Clinical; CBB-Biological and Biomedical Sciences; SC-CSH-Community Health and Human and Social Sciences; P-Pathology

2. STUDENT EVALUATIONS: THE YEAR OF RECOVERY

Traditionally, the school's annual evaluation process has achieved high student participation in answering questionnaires about the quality of courses and of faculty. In 2013/2014, student participation in evaluations was unusually low and well below the school's expectations. The alternative procedures that were set in motion for 2014/2015 had a positive effect in students' participation. Surveys were collected in paper format and the MEU made a strong effort to engage the students in the process. Answer rates rose significantly for the vast majority of curricular units (n17 equal or higher than 80%; n15 between 70% and 79%, n3 between 69% and 60%, n1 between 50% and 59%).

THE FOURTH YEAR EXPERIENCE WITH THE ALTERNATIVE TRACK

SELECTION PROCESS

The 2014-2015 graduate entry track selection process to the 18 places was identical to the previous year and included 3-steps: (1) administrative selection - mandated the delivery of a set of certificates, which included holding a previous degree with a final graduation grade point average equal or above 14/20 points; (2) written examination of knowledge – a Basic Sciences Admission Test with 100 multiple choice questions on biology, mathematics, chemistry and physics; (3) a Multiple Mini-interview like test– an OSCE-type series of 10 stations, intended to assess personal attributes and soft skills – and an analysis of the applicants' *curricula vitae*. The selection tools were developed in Minho by a team of faculty with expertise in assessments. The MMI's blueprint was identical to the previous year.

In the fourth edition of the MMIs in Minho, there were 24 examiners, of those 17 (70%) were ECS staff and 7 were external (30%). Both the applicants and the assessors evaluated the experience at the end of each round, answering a short questionnaire. When asked to state their preference between the format "Classical interview" and "Multiple Mini Interview", 25 (80,5%) of the responding applicants stated a preference for MMIS. Table 4 presents further evidence of high acceptability by applicants.

The appendix "The alternative track: a retrospective analysis" presents evidence sustaining the validity of the admission process.

Table 3: Acceptability of the MMI by candidates (n=31)

	Strongly Disagree	Slightly Disagree	Disagree	Agree	Slightly Agree	Strongly Agree
This MMIs are a fair format	0	1	0	20	4	6
Classical interviews (Cls) are a fair format	1	9	2	4	14	1
I enjoyed participating in this MMIs	0	1	0	17	3	10
I enjoy participating in CIs	2	3	0	10	11	2
This MMIs are effective to assess my competencies	0	1	0	15	8	7
This CIs are effective to assess my competencies	1	7	2	3	16	2

APPLICANTS AND ENTRANTS

In 2014/2015, there were 223 applicants to the graduate entry process (12 applicants/place). The top-scoring 27 students were admitted to the MMIs. 18 new students were selected. The next table shows the exam end MMI scores for the applicants and the selected students.

Table 4: Exam and MMI scores

	W	/ritten exam	Multiple mini interviews		
	Average			Average	
	Min - Max	± Standard Deviation	Min - Max	± Standard Deviation	
Applicants	0,0 - 12,2	4,3±2,6	_	-	
Top 28 applicants	7,9 - 12,2	9,0±1,0	7,6 – 15,0	11,4±1,7	
Selected students	8,1 – 12,2	9,5±1,0	8,4 – 15,0	11,6±1,7	

56% of the 18 students chose the University of Minho as their first option (as opposed to 65% last year). 19% also applied to other medical schools. Ages varied from 22 to 36 (mean 28,23; SD 4,69) and 56% of the students were female. Amongst the reasons that influenced students to choose ECS-UM were: the geographical proximity (44%) and the prestige of the degree (39%). The majority of students originated from the districts of Braga (44%) or Porto (19%). For 37% of the students, entering the ECS-UM medical degree implied moving away from home. 56% of the students hold a master degree and none were PhDs.

This new pool of students has a higher representation of Nurses, when compared to other degrees. More detailed information can be found below.

Table 5: Previous degrees of the graduate entry students

Academic year of Admission 2011/2012 2012/2013 2013/2014 2014/2015 Ν % Ν Ν % Ν % 1 5% 0 0% 2 13% 0 0% Clinical analysis 0 Pathology Anatomy 0 0% 2 11% 0 0% 0% Pathology, cytology and 1 5% 0 0% 0 0% 0 0% tanatological Anatomy 0 0% 0 0% 0 0% Physical Education 1 6% 0 Biology 1 5% 0% 2 13% 1 7% Biomedical Engineering 0 0% 0 0% 1 6% 0 0% 1 5% 0 0% 0 0% 0 0% Microbial Biology and genetics 1 5% 1 6% 1 6% 2 13% Biochemistry Cardio Pulmonology 1 0 0% 1 0 0% 5% 6% 5 5 Nursing 25% 2 11% 1 6% 33% 2 0 0 0% Biological Engineering 10% 0 0% 0% Pharmaceutical Sciences / 5 2 7% 1 5% 28% 13% 1 Pharmacy Mathematics 0 0% 0 0% 1 6% 1 7% 0 1 2 **Nutrition Sciences** 0% 6% 1 6% 13% 1 0 0% Physics and chemistry 5% 1 6% 0 0% 0 2 2 0 0% 11% 0% Physiotherapy 13% Psychology 0 0% 1 6% 0 0% 0 0% 1 0 0% 0 0% 0 0% **Dental Medicine** 5% Integrated Master in Industrial 1 5% 1 6% 0 0% 0 0% Electronics Engineering Civil Engineering 0 0% 1 6% 0 0% 0 0% 1 5% 0 0% 0 0% 0 0% Chemistry 2 0 0 1 Radiology 10% 0% 0% 7% 0 1 1 1 Veterinary Medicine 0% 6% 6% 7% 0 **Environmental Health** 0 0% 0% 0 0% 1 7%

20

Sample (representativeness)

100%

18

95%

16

94%

15

83%

ACADEMIC PERFORMANCE

At the end of the academic year, 95% of the newly admitted students successfully concluded all the 1st year curricular units. In 2015/2016, these students will converge with the 4th year of the original track.

The highest failure rate (5%) was registered for the curricular unit "Foundations of Medicine" which corresponds to 45 ECTS. Concerning performances in the unit "Introduction to Clinical Medicine", 17 new students (94%) completed the course assessment program. For the whole group of students (alternative and original track) the failure rate was 9%. In summary, the vast majority of the new students successfully completed their year 1 which suggests that the selection process and the course "Foundations of Medicine" prepared these students to succeed academically in the course Introduction to Clinical Medicine, with a level of scientific preparation comparable to that of the third year students on the 6 year program.

A retrospective analysis of the experience with the alternative track

The academic year 2014/2015 is marked by the graduation of the first cohort of students from the alternative track. The appendix "The alternative track: a retrospective analysis" presents a focused characterization of students registered in the alternative track, and analyses correlations between performance in selection tools and between performances in admissions and in courses. Briefly the results provide empirical evidence, which shed light on two crucial elements: 1. validation of the selection process, by demonstrating low and non significant correlations between the BSAT and the MMIs, and by finding predictive validity of performance in selection regarding performance in medical school; 2. Demonstration that students in the alternative track are able to perform in assessments of clinical knowledge, skills and professionalism, to an identical level of students of the original track. Thus, the evidence renders support to the premise that the 4 year program would allow the graduation of doctors who would be able to demonstrate performances to a level identical to that of 6 year programs.

3. ORIGINAL TRACK: THE ANNUAL EXPERIENCE WITH THE UNDERGRADUATE MEDICAL PROGRAM

The 2014/2015 experience in terms of student performance and the available student evaluations were overall identical to the previous year. Some important notes follow. Within the 6 year program, some courses experienced drops in failure rates - Introduction to the Medical Degree, Functional and Organic Systems I, Biopathology and Introduction to Therapeutics and Introduction to Community Health - the drops were from 14% to 9%, 30% to 18%, 10% to 4% and 8% to 2%. Nevertheless the Year 1 Functional and Organic Systems I continues to exhibit the highest student failure rates (30% in 2013/2014, droping to 18% in 2014/2015). In what concerns the alternative track, academic success increased in the course "Fundamentals of Medicine" (failure rates dropped from 14% to 5%). There was a small increase in failure rates for all 4th year curricular units (the highest increase was 5%).

The student response rates to the evaluations questionnaires were above 57% for all courses. There were 31 units in a total of 36 considered globally "excellent" by over 70% of the respondents. No curricular unit had negative evaluations. The courses Introduction to the Medical Degree, Medicine Residency I and Health Centre Residency received appreciations superior in at least ten perceptual points relatively to the previous year. Molecules and Cells, Maternal and Child Health Residency and From Clinical to Molecular Biology I received appreciations lower in at least ten perceptual points relatively to the previous year.

4. ORIGINAL TRACK: STUDENT SOCIO-DEMOGRAPHY: RETROSPECTIVE DESCRIPTIVE ANALYSIS

APPLICANTS

In 2014/2015, there were 818 applicants to the undergraduate medical degree of ECS-UM for the national admissions process ("Concurso Nacional de Acesso", approximately 7 applicants/available place). There is no public available information on the remaining special admissions processes ("Regimes Especiais de Acesso").

NEW STUDENTS

124 students were admitted through the National Admissions Process (contingents: general n=120, handicaps n=2 and islands/immigrants n=2), of whom 123 have valid registrations. 57% of these students chose the University of Minho as their 1st option (68% in the previous year). Admission grade point averages (GPAs) varied from 167.2 (island contingent) to 195,0 (general contingent) (M 181,57; SD 4,1). The lowest admission grade for the general contingent (M 181,77; SD 3,76) was 178,70 (184.5 in 2011/2012, 182.5 in 2012/2013 and 182.63 in 2013/2014). The admission GPAs show no further significant differences from the previous years. 2 students were admitted through Special Admissions Processes (1 from Portuguese speaking African countries and 1 diplomat).

The socio-demography of the 126 students in the 2014/2015 entering group, overall, was similar to matriculates over the past years. 59% of the students came from the public school system and 80% were first time college students. Student's age varied from 17 to 29 (mean 19.57; SD 1,24). 68% of the students were female. The retrospective analysis reveals that the factors that have influenced students to choose the ECS-UM have remained quite stable across time. In the present year, 78% of matriculates referred geographical proximity (it was the most influential for 42%). This might explain why only 23% students originate from districts in the country other than Braga (50% of matriculates) and Porto (27%). Nevertheless, 52% of the students left their family homes. Another primary factor taken into consideration by the students (74%) was the quality of the teaching and learning process (it was the most influential for 25% of the students). More detailed information can be found in the appendix "Students admitted/registered".

5. RESEARCH IN MEDICAL EDUCATION

This year's snapshot includes new insights derived from Minho's Longitudinal Study (ELECSUM) (appendix "The alternative track: a retrospective analysis") and three publications which illustrate the on going research in medical education associated with the undergraduate medical degree.

THE INVOLVEMENT OF UNDERGRADUATE MEDICAL STUDENTS IN MEDICAL EDUCATION RESEARCH

The school expects to increase the awareness of future doctors about the importance of medical education and, in particular, to the importance of educational research to inform best practices in training the medical workforce. The school has been welcoming students who express interest in developing educational research. In 2014/2015 there were three students in their senior years and one first year student involved in educational research. The resulting work has been accepted in international and national meetings. The school supported the students to present their work. There is one corresponding manuscript submitted for publication and the other 3 papers are expected to be submitted before the end of 2015. An example of abstract follows (accepted as an oral communication at the AMEE 2015 Annual Conference)

Abstract

Predictors of medical graduates' engagement in scientific research activities

Afonso R, Salgueira A, Costa MJ

Physicians' engagement in scientific research is vital for health care. However, there are concerns over a decline in the number of future physicians who consider engaging in post-graduate research. This study aimed to determine the influence of individual characteristics, academic performance and participation in undergraduate research on engagement in postgraduate research.

Cross-sectional study with all alumni of the School of Health Sciences, University of Minho, Portugal. Participants were surveyed about engagement in undergraduate and graduate research using a custom-made questionnaire. Answers were verified against institutional records. Data on demographic, personality and performance variables were available in a longitudinal database. Two logistic regression models were used to identify predictors of postgraduate research engagement: one for participation in all types of research and another for participation in more time-consuming structured research (leading to publication or PhD).

Complete sets of data were available for 275 participants (69% of graduates). 125 (46%) reported participation in graduate research. Structured research was verified for 47 (17%). Neuroticism (ORa=1,35), Openness to experience (ORa=1,50), Conscientiousness (ORa=1,31), higher academic performances (ORa=1,36, ORb=1,47), male gender (ORa=3,22, ORb=7,21) and participation in voluntary undergraduate research (ORb=4,14) enhanced the likelihood of engagement in all types of graduate research (ORa) and in structured research (ORb).

Post-graduate research engagement could be predicted by a combination of individual variables, academic performance and involvement in undergraduate research. Male gender weighed the most and voluntary engagement in undergraduate research was very important.

Medical schools should promote voluntary undergraduate research opportunities, targeting female students in particular.

THE FIRST RESEARCH IN MEDICAL EDUCATION MEETING

On November 22nd, the SHS-UM organized the first national meeting on research in medical education. The meeting attracted 88 participants from 13 institutions. The meeting disseminated research on Medical Education and the Health Sciences in progress throughout the country. The organization started from the initiative of a multi-institutional network in medical education research in development since 2010. The meeting met its initial goals: i. to promote the exchange between researchers and practitioners in the areas of Education and Health Education Sciences; ii to present and discuss results of research projects related to issues of Education in Health Sciences; iii. Contribute to the establishment and development of research networks among stakeholders in education research in Health Sciences. The second meeting is scheduled for November 2016 and. In December (2nd) 2015 a "Research Day in Medical Education" will take place. This new initiative will invite international methodological experts who will be challenged to present their research and run workshops to capacitate researchers in this new research field in the country.

EDUCATIONAL PAPERS AND PRESENTATIONS IN 2014/2015

Papers

- Lima M, Magalhães E, Salgueira A, Gonzalez AJ, Costa JJ, Costa MJ, Costa P (2014). A versão portuguesa do NEO-FFI: Caracterização em função da idade, género e escolaridade. Revista da Associação Portuguesa de Psicologia. 28(2). DOI: http://dx.doi.org/10.17575/rpsicol.v28i2.534
- Marvão P, Neto I, Castelo-Branco M, Ponte J, Portela M, Costa P, Costa MJ (2014). An exploratory study on the contribution of graduate entry student's personality to the diversity of medical student populations. Perspectives on Medical Education. 3(6):431-42. DOI: 10.1007/s40037-014-0150-z
- Costa MJ (2014). Trabalho em pequenos grupos: dos mitos à realidade. Medicina (Ribeirão Preto. Online). 47(3):308. DOI: 10.11606/issn.2176-7262.v47i3p308-313
- Palha J, Almeida A, Correia-Pinto J, Ferreira MA, Costa MJ, Sousa N (2015) Longitudinal Evaluation, acceptability and long term retention of knowledge on a horizontaly integrated Organic and Functional Systems course. Perspectives on Medical Education. In Press.

Oral communications

- Afonso R, Salgueira A, Costa MJ (2015). Predictors of medical graduates' engagement in scientific research activities. (accepted as an oral communication at the AMEE 2015 Annual Conference)
- Ferreira C, Costa P, Costa MJ (2015). Do the specialty preferences of medical students change during the "basic sciences" years? An exploratory study. (accepted as an oral communication at the AMEE 2015 Annual Conference)
- Salgueira AP, Gonçalves M, Cerqueira J, Costa MJ (2015). Factors underlying students¹ engagement in extra-curricular clinical training activities. (accepted as an oral communication at the AMEE 2015 Annual Conference)
- Goncalves R, Osório N, Pinheiro C, Garcia E, Costa, MJ (2015). Unexpected Difficulties In Cell Biology Revealed By Drawings Of First Year Medical Students. (accepted as an oral communication at the AMEE 2015 Annual Conference)
- Santos R, Lemos AR, Sandars JE, Costa MJ (2015). Self-regulatory processes and performance of 1st year medical students in the laboratory: an exploratory study. (accepted as an oral communication at the AMEE 2015 Annual Conference)
- Costa MJ (2015). El desarrollo de la empatía desde la realidad de la Universidad. Oral communication presented in III Curso Internacional: La Empatía Médica en el Cuidado del Paciente. El Prácticum. Logroño (La Rioja)
- Costa MJ, Santos R, Lemos AR, Sandars J (2015). Self-Regulatory skills and Laboratory performance: an exploratory study in 1st year Medical students. Oral communication presented in Annual Scientific Meeting of "Association for the study of Medical Education (ASME). Edinburg.
- Costa MJ, Ferreira F, Matos A (2015). Do medical students see older patients through different lenses? Oral communication presented in Annual Scientific Meeting of "Association for the study of Medical Education (ASME). Edinburg.
- Bastos H, Costa MJ, Costa RA, Volpe FP, Garcia E (2015). Team based learning no ensino da pneumologia um estudo piloto da aceitabilidade e desempenho dos alunos. Oral communication presented in "2º Seminário Inovação Pedagógica no Ensino Superior", Braga.
- Pereira VH, Ribeiro F, Morgado P, Lamas N, Mota P, Costa MJ, Cerqueira JJ, Marques F, Sousa JC (2015). Aplicação de team based learning no ensino/aprendizagem de um Sistema de órgãos num curso de medicina. Oral communication presented in "2º Seminário Inovação Pedagógica no Ensino Superior", Braga.
- Marques F, Miranda A, Novais H, Braga I, Rodrigues F, Sousa J, Costa MJ, Sousa N (2015). Uso de team based learning no ensino de biologia básica num curso de medicina. Oral communication presented in "2º Seminário Inovação Pedagógica no Ensino Superior", Braga.
- Osório N, Gonçalves R, Pinheiro C, Garcia E, Costa MJ (2015). O uso de desenhos como estratégia para identificar dificuldades conceptuais científicas de estudantes:um estudo de caso. Oral communication presented in "2º Seminário Inovação Pedagógica no Ensino Superior", Braga.
- Costa MJ, Almeida H, Cerqueira JJ, Marques F, Neves M, Sousa J, Osório N (2015). O exame laboratorial objetivo estruturado uma ferramenta inovadora para a avaliação de competências laboratoriais. Oral communication presented in "2º Seminário Inovação Pedagógica no Ensino Superior", Braga.

- Lemos AR, Osório N, Santos RB, Costa MJ (2015). A importância do desenvolvimento da auto regulação para a aprendizagem de competências laboratoriais de estudantes de medicina. Oral communication presented in "2º Seminário Inovação Pedagógica no Ensino Superior", Braga.
- Costa MJ, Osório N, Correia-Neves M, Lemos AR, Sousa N, Morgado P, Costa P (2014). Introdução ao curso de medicina: uma unidade curricular focada na adaptação dos estudantes ao ensino superior. Oral communication presented in "1º Seminário Inovação Pedagógica no Ensino Superior", Braga.
- Seabra F, Costa MJ (2014). Comunicação de más notícias pelos médicos no primeiro ano de internato um estudo exploratório. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Morgado P, Silva V, Pereira I, Faria R, Salgueira A, Costa MJ, Costa P, Cerqueira J, Sousa N (2014). Depressão, Ansiedade e Burnout em Estudantes de Medicina uma avaliação longitudinal. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Scoles P, Scoles P, Bessa J, Castro G, Salgueira A, Lemos AR, Costa MJ, Sousa N (2014). Experiência piloto de Team Based Learning no ensino do Sistema Locomotor um estudo qualitativo. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Águeda JP, Guimarães D, Costa P, Costa MJ (2014). Preditores da preferência da especialidade de estudantes de medicina em Portugal Um estudo transversal nacional. Oral communication presented in Congresso Nacional de Investigação em Educação Médica,Braga
- Lemos AR, Sandars JE, Alves MP, Costa MJ (2014). Evaluating student-centredeness of teaching: a new mixed-methods aproach. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Palha J, Almeida A, Correia-Pinto J, Ferreira MA, Costa MJ, Sousa N (2014). A horizontally integrated Organic and Functional Systems course in a Portuguese Medical School: longitudinal evaluation, acceptability and long-term retention of knowledge. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Fernandes F, Silva V, Ínsua I, Faria R, Salgueira A, Costa MJ, Costa P, Cerqueira J, Sousa N, Morgado P (2014). O impacto das dificuldades financeiras no distress do estudante de medicina. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Ferreira F, Costa MJ, Matos A (2014). Pacientes idosos: as representações sociais de estudantes de medicina. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Marvão P, Neto I, Castelo-Branco M, Ponte J, Portela M, Costa P, Costa MJ (2014). A look on the contribution of graduate entry students to the diversity of medical student populations. Focus on personality. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga
- Salgueira A, Costa P, Gonçalves M, Magalhães E, Costa MJ (2014). Engagement in scientific research the role of student's characteristics. Oral communication presented in Congresso Nacional de Investigação em Educação Médica, Braga

6. FINAL WORD

The 4 year graduate entry track of the medical degree is producing doctors who were able to perform to levels identical to students in the 6 year program. Most students in both tracks were able to complete their courses successfully. The issues related to the collection of student ratings on teaching were solved and the percentages of participation were, once again, in good ranges. The school gave a strong contribute to the development of multi-institutional research in medical education in the country. In summary, this was a year in which the undergraduate medical program maintained the standards of quality defined in the school's mission.

Braga, July 2015

Manuel João Costa (PhD) School of Health Sciences

Coordinator of the Medical Education Unit

MASTER IN MEDICINE



University of MinhoSchool of Health Sciences

APPENDIX
AUTUMN 2015 – A SNAPSHOT
ASSESSMENT OF THE ACADEMIC YEAR 2014/2015 AT THE
ENTRANCE OF 2015/2016

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INFORMATION REFERRED IN THE MAIN DOCUMENT

The Snapshot's *Appendix* presents the corresponding academic year's final scores distributions and results of student evaluations, for the curricular units of the undergraduate medical program of the School of Health Sciences of the University of Minho (ECS-UM). A retrospective comparative socio-demographical analysis since 2001 is also included.

Typically, courses' final scores are a combination of scores that result from individual assessments at different points in time, such as modular or end-of-year written tests, skill examinations and attitudinal observations. The curricular unit's assessment methodologies are defined in the first two weeks of the academic year and establish how the different scores are combined to produce the final score for each curricular unit. The boxplots in this *appendix* are computed from the database of the on going *Longitudinal Study of the School of Health Sciences of the University of Minho*.

As to the student course evaluations, the appendix presents the instruments, the process and the results for the present and former years. The process was designed in 2006 by the Scientific Council of ECS-UM and is under the responsibility of the Medical Education Unit (MEU). The process is systematic and originates results that are an important part of the multidimensional internal quality evaluation mechanisms of the ECS-UM's undergraduate medical program.

In addition, the appendix includes descriptive elements about the socio-demography of the entering class of 2014/2015 and a comparison between groups of students since the opening of the medical degree (2001-2002). The information is collected with a survey that students respond to voluntarily during students' first week in the medical school and the data are stored in a secure database. Informed consent is collected to collate the data to the *Longitudinal Study of the School of Health Sciences of the University of Minho*.

As for the Longitudinal Study the appendix includes two documents: (1) "The alternative track - a retrospective analysis" showing data on the first cohort of students to finish the medical degree through the alternative track; (2) Longitudinal Study in 1 page - a summary of data collection variables, timings and rates.

STUDENTS' AND CURRICULAR UNITS' EVALUATIONS

STUDENT EVALUATIONS: BRIEF DESCRIPTION OF THE PROCESS

Student evaluations are obtained through a systematic process and use questionnaires adapted to the ECS-UM approved by the School's Scientific Council in 2006 (summarized in table 1). The questionnaires are administered by the Medical Education Unit (MEU) that also manages the Student Evaluations of Teaching (SET) process and helps facilitate appropriate interpretations of SET figures. The questionnaires are typically applied within the 2 weeks following the end of a curricular unit. The questionnaires are used in Portuguese, therefore translations were developed for the purpose of inclusion in this appendix. There are specific questions used for distinct purposes:

- 1. "Overall Evaluation": of the general dimensions that all the curricular units should abide to; each student fills one questionnaire/curricular unit; includes the same 12 items (except for specific courses where some items do not apply);
- 2. "Evaluation of the Teaching and Learning Methodology": in years 1-3 for all courses that are primarily taught by ECS-UM's faculty and make use of the methodology of "objective structured modules" adopted by the medical school, each student fills one form/curricular unit; includes 10 items;
- 3. "Evaluation of Academic Faculty": on individual ECS-UM's faculty of all curricular units; each student fills one form/faculty the global scores presented in this snapshot are computed for every faculty of the corresponding curricular unit and the individual scores are communicated to each faculty and the corresponding unit coordinator; includes 8 items;
- 4. "Evaluation of Clinical Tutors/Services": on individual clinical tutors in the affiliated Health Care Institutions, applied exclusively to courses with clinical attachments (from the 3rd to the 6th year); each student fills one form/faculty the global scores presented in this snapshot are computed for every faculty of the corresponding curricular unit and the individual scores are communicated the unit supervisor; includes 10 items;

"Evaluation of Option Projects": used on all the elective curricular units of the medical degree; includes 8 items.

ITEMS FOR THE OVERALL EVALUATION

Curricular Unit (nuclear items)

1	I understood the learning objectives
2	The contents were delivered in accordance with the learning objectives
3	I have gained/developed abilities that I consider useful
4	The workload was appropriate to the time available for learning
5	The assessment process was coherent with the objectives
6	I was appropriately supervised in my learning process
7	The activities were well organized
8	The available resources were appropriate
9	My previous training prepared me adequately for this curricular unit
10	Globally, I consider the faculty is excellent
11	Globally, I consider the curricular unit is excellent
12	Globally, the curricular unit promoted my personal development

Items for the Evaluation of the Teaching and Learning Methodology in years 1-3

nems joi	ine i	Evaluation of the Teaching and Learning Methodology in years 1-3
Phase 1	1	Contributed to clarify the objectives
111000	2	Allowed the reactivation of prior knowledge
Phase 2	3	The time provided was sufficient
Thuse 2	4	The activities were important to the learning process
	5	I was stimulated to share what I learned
Phase 3	6	Provided an opportunity for a self-assessment relatively to the learning
	U	objectives
Phase 4	7	Contributed to overcome some of my previously identified learning gaps
1 11030 4	8	The faculty were available
Phase 5	9	The time provided to complete the examinations was appropriate
i iiuse s	10	The examinations reflected the learning objectives
	l	I e e e e e e e e e e e e e e e e e e e

Items for the Evaluation of Faculty

Faculty

	The faculty is knowledgeable in the concepts and phenomena implied in the learning
1	1
	objectives
2	The faculty arrives on time
_	The faculty arrives on time
3	The faculty aids in the identification, analysis and understanding of the learning objectives
4	The faculty orients the development of learning
5	The faculty stimulates and fosters critical thinking
6	The faculty motivates towards the fulfilment of learning objectives
7	The faculty helps in the synthesis and integration of knowledge
8	Overall, this faculty is excellent
	1

Items for the Evaluation of Clinical Tutors/Services

Tutors/Services

1	I had access to all the service components (e.g.: meetings, visits, examinations, etc.)
	1 had access to an the service components (e.g., meetings, visits, examinations, etc.)
2	I was stimulated to share my ideas, knowledge and doubts
3	The tutor was available to answer questions and to clarify uncertainties
4	The tutors' explanations were clear and organized
5	The tutor promoted contacts with patients with different pathologies
6	The tutor helped me to perform clinical procedures effectively
7	The tutor was knowledgeable the concepts, phenomena and clinical practices
8	I received appropriate supervision at the clinical settings
9	I rate this tutor as excellent
10	What I've learned in this service was useful

Items for the Evaluation of Option Projects

1	I understood the learning objectives
2	The elements of the assessment process reflect the objectives of the curricular unit
3	The assessment process was coherent with the objectives of the curricular unit
4	The evaluation parameters were defined in time
5	The workload was appropriate to the credit units
6	I would have developed this project, even if it was not compulsory
7	Globally, I learned a lot from this curricular unit
8	Globally, I consider this curricular unit excellent

Scale

Completely disagree Strongly disagree ②
Disagree ③
Agree ④
Strongly agree ⑤
Completely agree ⑥
Without an opinion ⑥

Legend

- for tutors, faculty and curricular unit assessment:

	Question with highest $\%$ of favorable responses
	Question with lowest % of favorable responses
3.	Question with less than 50% of favorable response

DISTRIBUTION OF STUDENT SCORES

As this snapshot is issued in July and there is a "Special season" for examination in the University of Minho, the figures included may change marginally in this year final records (September).

According to the University regulations, failures include:

- Non attendants: students with less than 2/3rds of class attendance; they fail accordingly to the University's regulation.
- Academic failing students: students who attended at least 2/3rds of classes; failure results from not complying with pass/fail academic criteria.

STUDENT EVALUATIONS

After a drop in students' response rates en 2013/2014, the MEU was able to invert the situation in 2014/2015. For more information see the specific report on the subject, available at the MEU.

STUDENT EVALUATIONS: RESPONSE RATES BY CURRICULAR UNIT

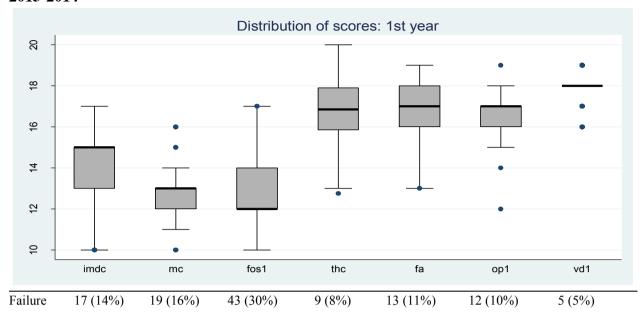
Curricular Unit	Curricular year	Number of years in study plan	Nuclear Items	Item about the method	Specific Items	Nº of students	Collection rate (%)
Introduction to the Medical Degree	1	14	X		X	141	88%
Molecules and Cells	1	14	X	X	X	136	80%
Functional and Organic Systems I	1	14	X	X	X	157	69%
First Aid	1	14	X		X	136	93%
Training in a Health Centre	1	14	X		X	126	52%
Option Project I	1	14			X	135	81%
Vertical Domains I	1	11	X		X	124	81%
Family, Society and Health I	2	5	X			109	82%
Functional and Organic Systems II	2	13	X	X	X	112	84%
Functional and Organic Systems III	2	13	X	X	X	114	77%
Option Project II	2	13			X	111	80%
Vertical Domains II	2	11	X		X	110	77%
Biopathology and introduction to therapeutics	3	12	X	X	X	139	83%
Introduction to Community Health	3	12	X	X	X	131	73%
Family, Society and Health II	3	4	X		X	124	79%
Vertical Domains III	3	11	X		X	124	79%
Foundations of Medicine	3PA	4	X		X	22	77%
Community Health, Social and Human Sciences	3PA	4	X		X	18	89%
Introduction to Clinical Medicine	3/3PA	12	X		X	159	93%
Medicine Residency I	4	11	X			136	86%
Clinical Neurosciences	4	5	X			134	85%
Health Centre Residency I	4	11	X			125	80%
Maternal and child Health Residency	4	11	X			136	79%
From Clinic to Molecular Biology I	4	11	X			140	76%
Option Project III	4	6			X	139	73%
Vertical Domains IV	4	11	X		X	143	70%
Surgery Residency	5	10	X			149	83%
Medicine Residency II	5	10	X			149	77%
Optional Residencies	5	10	X		X	148	70%
Health Centre Residency II	5	10	X			157	68%
From Clinic to Molecular Biology II	5	10	X			160	67%
Vertical Domains V	5	10	X		X	150	70%
Hospital Residencies – Final	6	9	X			135	76%
Health Centre Residency – Final Training	6	9	X			135	85%
From Clinic to Molecular Biology III	6	9	X			135	81%
Option Project – Final Project	6	9			X	135	72%

1ST YEAR

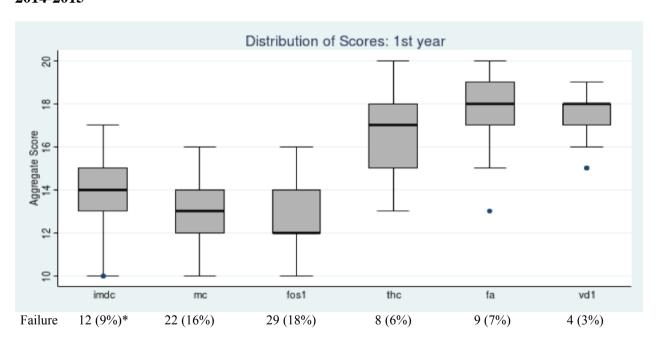
	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS	AVAILABLE
	CBB	Introduction to the Medical Degree Course	4	✓
	CBB	Molecules and Cells	24	\checkmark
ear	CBB	Functional and Organic Systems I	25	\checkmark
1st year	SC-CSH	Training in a Health Centre	1	\checkmark
1	SC-CSH	First Aid	1	\checkmark
	CBB / SC-CSH / P / C	Option Project I	4	\checkmark
	SC-CSH	Vertical Domains I	1	\checkmark
[TOTAL	60	

DISTRIBUTION OF STUDENT SCORES(*)

2013-2014



2014-2015



Legend

IMDC – Introduction to the Medical Degree Course

MC – Molecules and Cells

FOS1 – Functional and Organic Systems I

THC – Training in a Health Centre

FA – First Aid

OP1 - Option Project I

VD1 – Vertical Domains I

(*) Output provided by the database of ECS-UM Longitudinal Study

CURRICULAR UNIT: INTRODUCTION TO THE MEDICAL DEGREE

Overall Evaluation

Curricular Uni	t (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	2	2	0	0	0	1	0	0	0
	Strongly disagree	0	1	0	2	2	1	1	1	7	0	0	1
	Disagree	2	6	2	7	15	5	6	6	20	7	23	10
	Unfavorable responses	2	6	2	12	19	6	7	7	28	7	23	11
2014/2015	Agree	27	27	26	37	30	35	38	35	34	39	41	44
	Strongly agree	52	44	44	31	34	35	39	34	24	33	20	24
	Completely agree	19	23	28	20	18	23	16	22	11	19	13	18
	Favorable responses	98	94	98	88	81	93	93	91	69	90	74	86
	No opinion	0	0	0	0	0	2	0	2	2	2	3	2
	Unfavorable responses	20	24	20	15	28	22	19	23	28	27	43	26
2013/2014	Favorable responses	80	76	78	84	70	78	77	76	66	70	53	68
	No opinion	0	0	1	1	1	0	4	1	5	3	4	7

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	0	0	0	0	0	0	0	0
	Strongly disagree	0	0	0	1	1	1	1	0
	Disagree	1	1	7	9	6	7	6	4
	Unfavorable responses	1	1	8	11	6	8	7	5
2014/2015	Agree	9	9	22	23	24	26	26	24
	Strongly agree	24	23	35	33	32	33	33	35
	Completely agree	67	67	35	32	35	31	33	34
	Favorable responses	99	99	92	88	92	90	92	93
	No opinion	0	0	1	1	2	2	1	2
	Unfavorable responses	5	3	9	11	9	8	10	11
2013/2014	Favorable responses	92	94	88	86	87	90	87	85
	No opinion	3	4	3	3	4	3	3	4

CURRICULAR UNIT: MOLECULES AND CELLS

Overall Evaluation

Curricular Uni	t (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	1	2	5	3	3	1	4	6	5	3	2
	Strongly disagree	4	4	2	6	11	7	5	5	10	8	9	9
	Disagree	8	19	12	23	27	17	20	15	22	16	32	18
	Unfavorable responses	13	24	16	33	41	26	25	24	37	29	44	29
2014/2015	Agree	48	42	45	47	45	42	44	40	40	42	37	44
	Strongly agree	28	25	25	13	10	20	24	27	17	19	15	17
	Completely agree	11	9	13	7	3	10	6	8	6	9	3	8
	Favorable responses	86	76	84	67	58	72	74	75	63	70	55	69
	No opinion	1	0	0	0	1	2	1	1	0	2	1	3
	Unfavorable responses	9	14	11	27	33	13	25	19	31	25	25	19
2013/2014	Favorable responses	91	86	89	72	67	84	73	80	64	73	73	80
	No opinion	0	0	0	2	0	3	2	2	5	2	2	2

Curricular Unit	t (method items)	1	2	3	4	5	6	7	8	9	10
	Completely disagree	7	5	5	7	3	3	3	2	5	5
	Strongly disagree	8	9	9	17	5	3	7	4	6	15
	Disagree	13	22	15	22	12	13	5	4	14	27
	Unfavorable responses	29	36	29	47	19	19	15	10	25	47
2014/2015	Agree	44	40	36	34	31	43	30	26	28	38
	Strongly agree	20	18	15	13	30	25	13	14	21	10
	Completely agree	7	6	19	6	17	11	9	20	24	5
	Favorable responses	71	63	70	53	79	79	52	60	73	53
	No opinion	0	1	1	0	2	2	33	30	2	0
	Unfavorable responses	9	17	30	39	14	13	11	5	9	30
2013/2014	Favorable responses	91	83	69	59	84	88	52	61	91	70
	No opinion	0	0	2	2	2	0	38	34	0	0

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	1	1	1	1	1	2	1	1
	Strongly disagree	0	1	1	1	1	1	2	1
	Disagree	4	4	7	9	11	10	8	8
	Unfavorable responses	5	5	9	11	13	14	11	10
2014/2015	Agree	25	23	31	32	30	30	31	30
	Strongly agree	29	30	28	30	28	29	29	30
	Completely agree	40	41	30	25	27	26	28	28
	Favorable responses	94	93	90	88	85	85	88	88
	No opinion	1	1	1	1	2	2	1	3
	Unfavorable responses	5	3	8	10	11	11	8	9
2013/2014	Favorable responses	94	95	91	88	86	86	90	88
	No opinion	1	3	2	2	3	3	2	2

CURRICULAR UNIT: FUNCTIONAL AND ORGANIC SYSTEMS I

Overall Evaluation

Curricular Un	it (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	0	0	0	0	0	1	0	0	0
	Strongly disagree	0	0	0	4	1	0	2	0	2	0	0	0
	Disagree	1	4	0	15	9	9	7	6	17	4	3	2
	Unfavorable responses	1	4	0	19	10	9	8	6	20	4	3	2
2014/2015	Agree	38	46	31	62	53	50	46	53	49	47	39	36
	Strongly agree	42	38	38	13	28	29	35	31	24	38	35	30
	Completely agree	19	12	31	6	8	10	8	10	7	10	23	32
	Favorable responses	99	96	100	81	89	90	90	94	79	95	96	98
	No opinion	0	0	0	0	1	1	2	0	1	1	1	0
	Unfavorable responses	0	4	0	48	22	9	9	13	26	4	4	0
2013/2014	Favorable responses	100	91	100	48	74	87	87	87	74	91	96	100
	No opinion	0	4	0	4	4	4	4	0	0	4	0	0

Curricular Un	it (method items)	1	2	3	4	5	6	7	8	9	10
	Completely disagree	1	1	0	0	0	0	1	1	0	2
	Strongly disagree	2	3	1	0	1	0	1	2	0	2
	Disagree	14	19	21	4	9	4	5	1	4	8
	Unfavorable responses	17	23	21	4	10	4	7	4	4	12
2014/2015	Agree	47	45	49	44	51	45	32	32	33	57
	Strongly agree	25	24	22	34	26	33	13	16	27	20
	Completely agree	9	6	7	17	9	16	5	6	36	8
	Favorable responses	81	75	79	94	86	94	49	53	96	86
	No opinion	2	2	0	2	4	2	44	43	0	2
	Unfavorable responses	17	30	39	13	4	13	4	0	0	17
2013/2014	Favorable responses	78	61	57	83	91	83	35	43	100	83
	No opinion	4	9	4	4	4	4	61	57	0	0

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	0	0	0	0	0	0	0	0
	Strongly disagree	0	0	0	0	0	0	0	0
	Disagree	1	2	2	2	3	3	2	2
	Unfavorable responses	1	2	3	3	3	4	3	3
2014/2015	Agree	26	26	30	32	31	32	31	30
	Strongly agree	21	19	24	24	23	23	23	24
	Completely agree	31	31	23	20	21	21	22	22
	Favorable responses	78	76	76	76	75	75	76	75
	No opinion	21	22	21	21	21	21	21	22
	Unfavorable responses	2	2	5	6	4	6	7	5
2013/2014	Favorable responses	91	91	88	86	89	87	86	88
	No opinion	7	7	7	7	7	7	7	7

CURRICULAR UNIT: TRAINING IN A HEALTH CENTRE

Overall Evaluation

Curricular Uni	it (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	2	-	0	2	2	2	2	-	-	2	2
	Strongly disagree	0	0	-	0	0	0	0	0	-	-	0	0
	Disagree	2	2	-	3	2	5	5	3	-	-	3	2
	Unfavorable responses	2	3	-	3	3	6	6	5	-	-	5	3
2014/2015	Agree	5	9	-	10	10	5	9	8	-	-	5	5
	Strongly agree	25	22	-	22	16	19	17	25	-	-	20	19
	Completely agree	68	66	-	65	65	68	66	63	-	-	69	73
	Favorable responses	98	97	-	97	90	92	92	95	-	-	94	97
	No opinion	0	0	-	0	6	2	2	0	-	-	2	0
	Unfavorable responses	0	0	-	4	2	4	0	0	-	-	0	0
2013/2014	Favorable responses	100	100	-	96	94	96	100	98	-	-	100	100
	No opinion	0	0	-	0	4	0	0	2	-	-	0	0

CURRICULAR UNIT: FIRST AID

Overall Evaluation

Curricular Unit (nuclear items)		1	2	3	4	5	6	7	8	9	10	11	12
2014/2015	Completely disagree	0	0	0	1	0	0	0	0	0	-	0	0
	Strongly disagree	0	0	0	0	2	1	1	2	0	-	0	0
	Disagree	0	2	0	2	6	0	2	6	9	-	1	0
	Unfavorable responses	0	2	0	3	7	1	2	8	9	-	1	0
	Agree	10	14	6	12	25	12	15	18	23	-	11	12
	Strongly agree	34	33	27	29	27	37	35	33	27	-	35	25
	Completely agree	56	51	67	56	40	51	48	41	37	-	52	63
	Favorable responses	100	98	100	97	92	99	98	92	87		98	100
	No opinion	0	1	0	0	1	0	0	0	5	-	1	0
2013/2014	Unfavorable responses	2	4	0	2	5	1	2	5	10	-	1	0
	Favorable responses	98	95	100	97	90	99	98	95	83	-	99	100
	No opinion	0	1	0	1	5	0	0	0	6	-	0	0

CURRICULAR UNIT: OPTION PROJECT I

Curricular U	nit (specific items)	1	2	3	4	5	6	7	8
	Completely disagree	0	0	0	0	0	1	0	0
	Strongly disagree	0	0	0	0	4	2	0	0
	Disagree	0	2	4	2	6	6	1	1
	Unfavorable responses	0	2	4	2	9	9	1	1
2014/2015	Agree	22	36	37	32	34	28	30	27
	Strongly agree	29	35	34	29	28	25	23	26
	Completely agree	49	26	25	37	28	36	46	45
	Favorable responses	100	97	96	98	91	89	99	97
	No opinion	0	1	0	0	0	2	0	2
	Unfavorable responses	0	4	4	1	14	17	0	0
2013/2014	Favorable responses	98	86	90	98	85	78	100	100
	No opinion	2	11	6	1	1	5	0	0

CURRICULAR UNIT: VERTICAL DOMAINS I

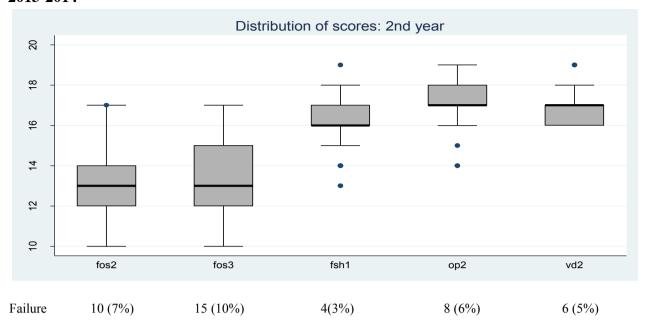
Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	0	0	-	0	0	1	-	1	0
	Strongly disagree	1	0	0	0	0	-	0	0	0	-	0	1
	Disagree	1	3	3	3	3	-	2	3	4	-	2	3
	Unfavorable responses	2	3	3	3	3	-	2	3	5	-	3	4
2014/2015	Agree	14	11	16	15	21	-	19	22	21	-	24	22
	Strongly agree	48	53	45	49	44	-	53	46	45	-	44	46
	Completely agree	33	28	31	29	28	-	22	25	23	-	25	26
	Favorable responses	95	93	93	94	94	-	94	93	89	-	93	94
	No opinion	3	4	4	3	3	-	4	4	5	-	4	2
	Unfavorable responses	5	4	10	13	6		2	2	25		5	13
2013/2014	Favorable responses	93	94	89	86	79		98	95	65		95	86
	No opinion	2	2	1	1	15		0	2	10		0	1

2ND YEAR

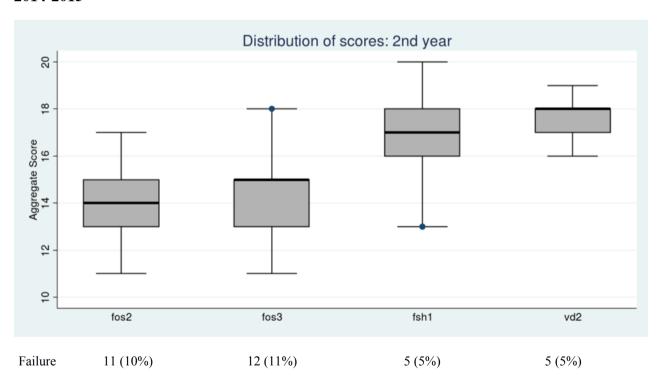
	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS	AVAILABLE
	CBB	Functional and Organic Systems II	26	\checkmark
ar	CBB	Functional and Organic Systems III	23	\checkmark
2nd year	SC-CSH	Family, Society and Health I	4	\checkmark
2n	CBB / SC-CSH / P / C	Option Project II	6	\checkmark
_	SC-CSH	Vertical Domains II	1	✓
		TOTAL	60	

DISTRIBUTION OF STUDENT SCORES(*)

2013-2014



2014-2015



Legend

FOS2 – Functional and Organic Systems II

FOS3 – Functional and Organic Systems III

FSH1 – Family, Society and Health I

OP2 - Option Project II

VD2 – Vertical Domains II

(*) Output provided by the database of ECS-UM Longitudinal Study.

CURRICULAR UNIT: FUNCTIONAL AND ORGANIC SYSTEMS II

Overall Evaluation

Curricular Un	it (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	1	0	0	0	0	0	1	0	0
	Strongly disagree	1	1	0	3	0	1	1	1	2	0	0	1
	Disagree	0	7	1	20	5	14	16	13	21	12	7	3
	Unfavorable responses	1	9	1	25	5	15	17	14	23	13	7	4
2014/2015	Agree	27	39	26	47	53	37	55	50	43	54	47	29
	Strongly agree	56	38	49	25	36	37	24	31	27	28	39	55
	Completely agree	16	14	24	3	5	10	3	5	6	5	6	12
	Favorable responses	99	91	99	75	95	84	82	86	76	87	93	96
	No opinion	0	0	0	0	0	1	1	0	1	0	0	0
	Unfavorable responses	4	24	4	24	16	12	12	24	16	8	8	8
2013/2014	Favorable responses	92	72	92	72	80	84	84	72	80	88	88	88
	No opinion	4	4	4	4	4	4	4	4	4	4	4	4

Curricular Un	it (method items)	1	2	3	4	5	6	7	8	9	10
	Completely disagree	3	3	1	1	1	0	3	2	0	0
	Strongly disagree	10	11	11	2	3	3	0	0	0	1
	Disagree	15	23	12	7	5	4	9	7	1	7
	Unfavorable responses	28	37	23	11	10	7	12	10	1	9
2014/2015	Agree	31	36	38	37	40	28	13	13	11	47
	Strongly agree	37	23	31	47	31	38	3	4	23	38
	Completely agree	4	2	7	5	19	27	4	6	63	6
	Favorable responses	72	62	77	89	90	93	20	23	97	91
	No opinion	0	1	0	0	0	0	68	67	2	0
	Unfavorable responses	20	40	12	16	8	8	0	4	8	20
2013/2014	Favorable responses	76	56	84	80	84	84	40	36	88	76
	No opinion	4	4	4	4	8	8	60	60	4	4

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	1	1	1	1	1	1	1	1
	Strongly disagree	1	1	2	2	2	2	1	1
	Disagree	5	5	7	7	8	8	7	7
	Unfavorable responses	7	7	9	10	11	10	10	10
2014/2015	Agree	20	20	23	24	23	25	24	24
2014/2015	Strongly agree	27	26	29	29	27	27	29	29
	Completely agree	38	39	30	30	29	29	30	29
	Favorable responses	84	85	83	82	80	81	82	82
	No opinion	8	8	8	8	9	9	8	8
	Unfavorable responses	3	3	5	7	7	7	6	6
2013/2014	Favorable responses	86	85	83	82	82	81	82	82
	No opinion	11	12	12	11	12	12	12	12

CURRICULAR UNIT: FUNCTIONAL AND ORGANIC SYSTEMS III

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	2	1	4	1	0	2	2	1	2	1	1
	Strongly disagree	0	0	0	1	1	5	1	0	2	0	2	1
	Disagree	5	12	3	8	5	5	12	11	12	5	2	1
	Unfavorable responses	6	14	5	13	7	10	15	13	15	7	6	4
2014/2015	Agree	27	28	17	44	40	42	38	37	44	33	34	27
	Strongly agree	44	40	48	32	39	33	32	36	21	46	41	46
	Completely agree	22	17	29	10	12	14	13	12	15	12	18	21
	Favorable responses	93	85	94	86	92	89	83	86	81	90	93	95
	No opinion	1	1	1	1	1	1	1	1	4	2	1	1
	Unfavorable responses	0	6	0	13	6	6	19	6	31	6	13	0
2013/2014	Favorable responses	100	94	100	88	94	94	81	94	69	94	88	100
	No opinion	0	0	0	0	0	0	0	0	0	0	0	0

Curricular Un	it (method items)	1	2	3	4	5	6	7	8	9	10
	Completely disagree	2	4	4	1	1	0	2	1	0	1
	Strongly disagree	1	2	2	2	1	0	1	0	0	1
	Disagree	14	18	14	7	8	4	5	7	3	12
	Unfavorable responses	17	24	20	11	10	4	9	8	3	14
2014/2015	Agree	41	40	32	31	40	27	11	12	12	34
	Strongly agree	27	23	33	44	37	48	7	5	29	36
	Completely agree	14	12	14	14	9	18	6	8	55	15
	Favorable responses	81	75	79	88	86	93	24	25	95	85
	No opinion	1	1	1	1	3	4	67	67	1	1
	Unfavorable responses	38	38	13	6	19	6	0	0	0	13
2013/2014	Favorable responses	63	63	88	94	81	94	31	38	100	88
	No opinion	0	0	0	0	0	0	69	63	0	0

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	1	1	1	1	1	1	1	1
	Strongly disagree	1	1	1	1	1	1	1	1
	Disagree	4	4	5	5	5	6	5	5
	Unfavorable responses	6	6	7	7	7	8	7	7
2014/2015	Agree	19	18	23	24	24	23	22	24
2011/2015	Strongly agree	30	27	29	28	27	28	28	28
	Completely agree	32	36	29	28	28	27	29	28
	Favorable responses	81	81	80	79	79	79	80	80
	No opinion	13	13	13	13	14	13	13	13
	Unfavorable responses	6	6	6	8	8	7	9	9
2013/2014	Favorable responses	89	89	89	87	87	88	86	86
	No opinion	5	5	5	5	5	5	5	5

CURRICULAR UNIT: FAMILY, SOCIETY AND HEALTH I

Curricular Ur	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	1	0	0	0	0	1	0	1	0	1	0
	Strongly disagree	0	0	1	1	1	2	1	1	3	1	1	2
	Disagree	3	1	2	6	6	1	3	2	8	5	7	1
	Unfavorable responses	5	2	3	7	7	3	6	3	13	6	9	3
2014/2015	Agree	6	13	15	16	22	18	19	16	21	18	25	18
	Strongly agree	43	39	38	33	33	31	38	35	30	42	39	32
	Completely agree	46	45	43	43	38	47	36	44	28	32	26	45
	Favorable responses	94	97	95	92	92	95	93	95	78	92	90	95
	No opinion	1	1	1	1	1	1	1	1	9	2	1	1
	Unfavorable responses	0	0	0	6	12	0	6	0	6	12	12	0
2013/2014	Favorable responses	100	100	100	94	88	100	94	100	82	88	88	100
	No opinion	0	0	0	0	0	0	0	0	12	0	0	0

CURRICULAR UNIT: OPTION PROJECT II

Curricular Uni	t (specific items)	1	2	3	4	5	6	7	8
	Completely disagree	0	0	0	0	2	1	0	1
	Strongly disagree	1	1	1	2	2	1	1	0
	Disagree	0	3	4	2	5	4	0	0
	Unfavorable responses	1	4	6	4	9	7	1	1
2014/2015	Agree	9	15	16	13	27	16	6	9
	Strongly agree	43	49	48	36	32	33	35	38
	Completely agree	47	28	30	45	32	44	58	52
	Favorable responses	99	92	94	94	91	92	99	99
	No opinion	0	3	0	1	0	1	0	0
	Unfavorable responses	2	5	4	15	11	6	2	2
2013/2014	Favorable responses	98	93	94	83	89	93	98	97
	No opinion	0	2	2	2	0	1	0	1

CURRICULAR UNIT: VERTICAL DOMAINS II

Curricular U	Init (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	0	0	-	0	0	0	-	0	0
	Strongly disagree	4	5	1	1	2	-	4	1	2	-	1	1
	Disagree	2	5	12	6	0	-	4	2	6	-	5	8
	Unfavorable responses	6	10	13	7	2	-	7	4	8	-	6	10
2014/2015	Agree	34	37	44	44	38	-	39	40	31	-	33	39
	Strongly agree	39	32	25	29	39	-	36	41	32	-	39	35
	Completely agree	20	19	18	19	14	-	16	14	22	-	19	13
	Favorable responses	93	88	86	92	92	-	92	95	85	-	92	87
	No opinion	1	2	1	1	6	-	1	1	7	-	2	4
	Unfavorable responses	6	6	16	17	9		13	11	19		9	27
2013/2014	Favorable responses	94	91	83	81	85		86	88	76		91	73
	No opinion	0	2	1	2	6		1	1	5		0	0

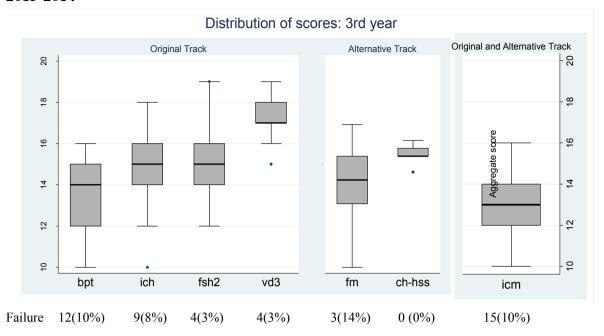
3RD YEAR

	SCIENTIFIC AREA	CURRICULAR UNITS		ECTS	AVAILABLE
	P	Biopathology and Introduction to Therapeutics		43	\checkmark
ear	SC-CSH	Introduction to Community Health		4	\checkmark
3rd year	C	Introduction to Clinical Medicine		10,5	\checkmark
60	SC-CSH	Family, Society and Health II		1,5	\checkmark
	SC-CSH	Vertical Domains III		1	\checkmark
			TOTAL	60	

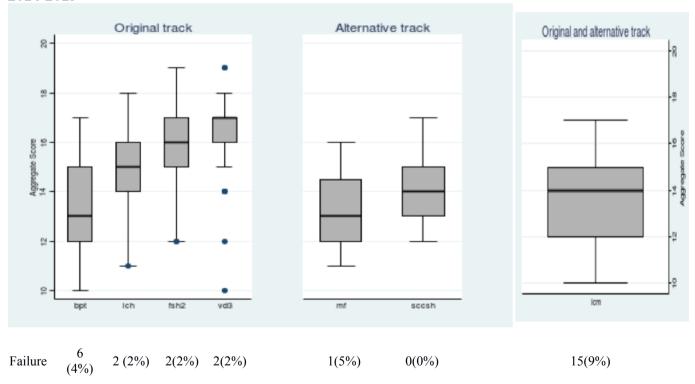
	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS	AVAILABLE
r	С	Introduction to Clinical Medicine	10,5	\checkmark
year nativ ack	CBB / P	Foundations of Medicine	45	\checkmark
3rd Alter Tra	SC-CSH	Community Health, Human and Social Science	4,5	\checkmark
		TOTAL	60	

DISTRIBUTION OF STUDENT SCORES(*)

2013-2014



2014-2015



Legend

BPT – Biopathology and Introduction to Therapeutics

FSH2 – Family, Society and Health II

ICH – Introduction to Community Health

ICM – Introduction to Clinical Medicine

VD3 - Vertical Domains III

FM – Foundations of Medicine

CHHSS - Community Health, Human and Social Sciences

 $(\ensuremath{^*})$ Output provided by the database of ECS-UM Longitudinal Study.

CURRICULAR UNIT: BIOPATHOLOGY AND INTRODUCTION TO THERAPEUTICS

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	4	2	1	1	1	0	0	0	0
	Strongly disagree	1	0	0	3	2	1	1	0	4	2	3	1
	Disagree	3	10	3	35	19	11	17	13	16	5	6	4
	Unfavorable responses	4	10	3	42	23	13	18	14	20	7	9	4
2014/2015	Agree	40	46	31	39	48	48	57	51	53	40	42	40
	Strongly agree	36	32	34	15	26	29	19	27	21	37	32	31
	Completely agree	20	12	32	4	3	11	5	7	7	15	15	25
	Favorable responses	96	90	97	58	76	88	82	85	80	92	89	96
	No opinion	0	0	0	0	1	0	0	1	0	1	2	0
	Unfavorable responses	3	10	0	16	13	3	10	10	3	3	13	3
2013/2014	Favorable responses	97	90	100	84	87	97	90	90	94	97	87	94
	No opinion	0	0	0	0	0	0	0	0	3	0	0	3

Curricular Unit (method items)

Curricular U	nit (method items)	1	2	3	4	5	6	7	8	9	10
	Completely disagree	10	10	2	1	3	3	1	2	0	1
	Strongly disagree	14	16	5	5	4	2	4	2	0	3
	Disagree	23	23	20	13	10	9	11	4	3	14
	Unfavorable responses	47	49	27	19	16	14	16	8	3	18
2014/2015	Agree	34	35	33	43	39	44	21	18	22	54
	Strongly agree	17	13	31	29	28	27	10	11	22	18
	Completely agree	1	1	9	9	15	13	12	27	53	10
	Favorable responses	52	48	73	81	82	83	42	55	97	82
	No opinion	1	3	0	0	3	3	42	37	0	0
	Unfavorable responses	16	13	10	6	3	3	3	3	3	19
2013/2014	Favorable responses	84	87	90	94	94	94	65	71	97	81
	No opinion	0	0	0	0	3	3	32	26	0	0

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	1	1	1	1	1	2	1	1
	Strongly disagree	1	2	2	2	2	3	2	2
	Disagree	5	5	7	9	9	9	8	8
	Unfavorable responses	8	9	11	12	13	14	11	11
2014/2015	Agree	17	19	22	23	23	22	22	22
	Strongly agree	26	24	28	27	26	26	26	27
	Completely agree	43	42	33	32	32	31	34	33
	Favorable responses	86	85	82	81	81	80	82	82
	No opinion	7	7	7	7	7	7	7	7
	Unfavorable responses	2	2	4	4	5	4	5	4
2013/2014	Favorable responses	94	94	92	92	91	92	91	91
	No opinion	4	4	4	4	4	4	4	4

CURRICULAR UNIT: INTRODUCTION TO COMMUNITY HEALTH

Overall Evaluation

Curricular Ur	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	4	3	4	2	2	1	3	2	4	3	5	5
	Strongly disagree	3	3	3	4	4	3	3	1	3	0	1	1
	Disagree	3	6	3	8	8	4	7	5	12	4	8	9
	Unfavorable responses	10	13	11	14	14	9	13	9	19	8	14	15
2014/2015	Agree	40	40	46	52	46	44	51	49	51	45	47	42
	Strongly agree	35	34	30	26	32	32	27	35	24	34	31	33
	Completely agree	15	13	13	8	6	15	9	8	6	14	8	10
	Favorable responses	90	87	89	86	85	91	87	91	81	92	86	85
	No opinion	0	0	0	0	1	0	0	0	0	0	0	0
	Unfavorable responses	17	34	24	28	28	66	76	45	28	41	59	24
2013/2014	Favorable responses	79	62	72	69	66	31	21	52	59	55	34	66
	No opinion	3	3	3	3	7	3	3	3	14	3	7	10

Curricular U	nit (method items)	1	2	3	4	5	6	7	8	9	10
	Completely disagree	5	5	3	2	4	4	6	5	19	3
	Strongly disagree	5	7	2	3	4	5	5	4	9	3
	Disagree	11	16	1	8	9	5	4	4	23	8
	Unfavorable responses	22	28	6	14	18	15	16	14	51	15
2014/2015	Agree	45	38	41	38	36	40	26	24	20	43
	Strongly agree	24	25	39	41	32	33	18	20	17	29
	Completely agree	8	7	15	7	10	9	6	10	11	13
	Favorable responses	76	70	94	86	79	82	50	53	48	84
	No opinion	2	2	0	0	3	3	34	33	1	1

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	1	2	1	1	1	1	1	1
	Strongly disagree	1	1	1	1	1	1	1	1
	Disagree	3	5	4	3	4	4	3	3
	Unfavorable responses	5	8	7	5	6	7	6	6
2014/2015	Agree	20	22	22	24	23	24	23	23
	Strongly agree	38	35	38	37	38	35	37	38
	Completely agree	32	29	28	28	28	28	28	29
	Favorable responses	90	86	88	89	88	88	89	89
	No opinion	5	6	6	6	6	6	5	5
	Unfavorable responses	2	8	7	12	11	11	8	7
2013/2014	Favorable responses	92	85	85	80	83	81	85	80
	No opinion	7	7	7	7	6	7	7	12

CURRICULAR UNIT: FAMILY, SOCIETY AND HEALTH II

Curricular U	Init (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	2	2	2	0	5	4	2	3	4	5	4	5
	Strongly disagree	0	1	3	5	8	5	2	2	1	6	1	0
	Disagree	6	10	10	8	9	5	8	4	9	8	10	5
	Unfavorable responses	9	13	15	13	22	15	12	10	14	19	15	11
2014/2015	Agree	28	24	29	27	20	27	35	30	32	27	40	31
	Strongly agree	34	42	36	39	40	35	33	38	35	32	28	40
	Completely agree	30	21	20	22	17	22	20	21	17	20	16	18
	Favorable responses	91	87	85	87	77	84	87	89	84	80	84	89
	No opinion	0	0	0	0	1	1	1	1	2	1	1	0
	Unfavorable responses	0	6	6	11	44	22	11	6	0	6	17	6
2013/2014	Favorable responses	100	94	94	89	56	72	89	89	94	94	78	94
	No opinion	0	0	0	0	0	6	0	6	6	0	6	0

CURRICULAR UNIT: VERTICAL DOMAINS III

Curricular U	Init (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	3	1	2	0	1	-	1	1	0	-	0	1
	Strongly disagree	2	2	3	2	3	-	2	3	4	-	4	3
	Disagree	5	7	8	12	5	-	9	7	7	-	8	7
	Unfavorable responses	11	10	13	14	10	-	12	11	11	-	12	11
2014/2015	Agree	33	30	35	31	34	-	27	34	34	-	29	34
	Strongly agree	33	38	32	32	33	-	36	36	28	-	35	32
	Completely agree	23	22	20	22	21	-	26	19	26	-	24	23
	Favorable responses	89	90	87	86	88	-	88	89	88	-	88	89
	No opinion	0	0	0	0	2	-	0	0	1	-	0	0
	Unfavorable responses	15	19	17	24	20		16	15	17		15	16
2013/2014	Favorable responses	82	77	80	74	75		82	82	79		82	81
	No opinion	3	4	3	3	5		3	3	4		3	3

CURRICULAR UNIT: FOUNDATIONS OF MEDICINE

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	13	0	0	0	0	12	0	0	0
	Strongly disagree	0	0	0	6	0	0	0	6	0	0	0	0
	Disagree	0	6	0	25	18	6	6	12	12	0	0	0
	Unfavorable responses	0	6	0	44	18	6	6	18	24	0	0	0
2014/2015	Agree	18	24	6	25	12	6	41	12	29	6	12	12
	Strongly agree	35	59	41	19	47	65	41	41	18	35	24	12
	Completely agree	47	12	53	13	18	24	12	29	24	59	65	76
	Favorable responses	100	94	100	56	76	94	94	82	71	100	100	100
	No opinion	0	0	0	0	6	0	0	0	6	0	0	0
	Unfavorable responses	0	0	0	43	14	14	0	0	29	0	0	0
2013/2014	Favorable responses	100	100	100	57	86	71	100	100	57	100	100	100
	No opinion	0	0	0	0	0	0	0	0	0	0	0	0

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	0	0	0	0	0	0	0	0
	Strongly disagree	0	0	0	0	0	0	0	0
	Disagree	2	3	4	4	5	4	4	3
	Unfavorable responses	3	3	4	5	6	5	5	4
2014/2015	Agree	11	11	16	17	15	16	15	12
	Strongly agree	23	26	23	23	23	25	24	29
	Completely agree	58	55	51	50	51	49	51	50
	Favorable responses	92	92	91	90	89	90	90	91
	No opinion	5	5	5	5	5	5	5	5
	Unfavorable responses	1	3	2	4	4	4	4	3
2013/2014	Favorable responses	99	97	98	96	96	96	96	97
	No opinion	0	0	0	0	0	0	0	0

CURRICULAR UNIT: COMMUNITY HEALTH, HUMAN AND SOCIAL SCIENCES

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	0	0	0	0	0	13	0	0	0
	Strongly disagree	0	0	0	7	0	0	0	0	0	0	0	0
	Disagree	0	0	13	0	7	0	0	13	13	0	6	7
	Unfavorable responses	0	0	13	7	7	0	0	13	25	0	6	7
2014/2015	Agree	31	19	19	20	13	13	13	6	19	0	0	0
	Strongly agree	19	38	13	20	27	38	38	25	19	31	38	27
	Completely agree	44	38	50	40	47	38	38	50	25	56	50	60
	Favorable responses	94	94	81	80	87	88	88	81	63	88	88	87
	No opinion	6	6	6	13	7	13	13	6	13	13	6	7
	Unfavorable responses	0	0	0	0	0	0	0	0	0	0	0	0
2013/2014	Favorable responses	100	0	100	100	100	0	0	0	100	0	100	100
	No opinion	0	100	0	0	0	100	100	100	0	100	0	0

Evaluation of Academic Faculty

Faculty		1	2	3	4	5	6	7	8
	Completely disagree	0	0	0	0	0	0	0	0
	Strongly disagree	0	0	0	1	1	1	0	1
-	Disagree	2	3	4	4	5	4	4	3
	Unfavorable responses	3	3	4	5	6	5	5	4
2014/2015	Agree	10	11	16	16	14	15	15	11
	Strongly agree	23	25	22	22	23	24	23	28
	Completely agree	57	54	51	50	50	49	50	50
	Favorable responses	90	90	88	88	87	88	88	89
	No opinion	7	7	7	7	7	7	7	7

CURRICULAR UNIT: INTRODUCTION TO CLINICAL MEDICINE

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	3	3	1	3	17	7	5	5	4	2	4	2
	Strongly disagree	3	9	1	5	15	7	6	3	1	3	5	1
	Disagree	8	16	3	10	17	15	17	10	7	6	17	5
	Unfavorable responses	14	28	5	18	49	29	28	18	13	12	26	7
2014/2015	Agree	28	24	22	33	21	30	32	33	31	39	24	31
	Strongly agree	32	30	36	33	20	27	26	32	35	33	32	34
	Completely agree	25	19	37	15	8	14	15	17	20	16	18	28
	Favorable responses	85	72	95	81	49	70	72	82	86	88	74	93
	No opinion	1	0	0	1	3	1	0	0	1	0	0	0
	Unfavorable responses	9	23	3	15	43	19	21	17	17	18	17	5
2013/2014	Favorable responses	91	77	97	85	56	81	78	83	81	80	83	95
	No opinion	0	0	0	0	1	0	1	1	2	2	0	1

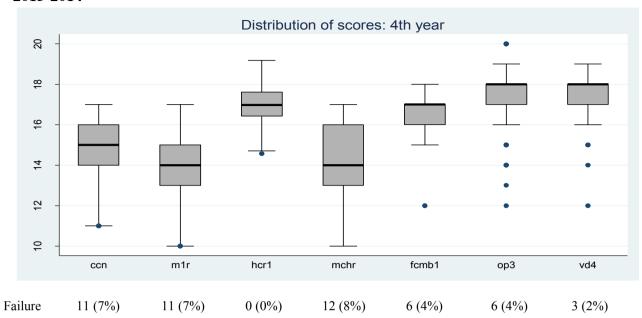
Tutors/Servi	ces	1	2	3	4	5	6	7	8	9	10
	Completely disagree	2	0	0	1	2	2	0	2	2	1
Completely disagree 2 0 0 1 2 Strongly disagree 0 1 2 1 0 Disagree 3 3 3 5 2 Unfavorable responses 5 4 5 6 5 Agree 17 16 13 13 10 Strongly agree 24 28 17 19 2 Completely agree 53 52 65 61 50 Favorable responses 94 95 95 93 90 No opinion 1 1 0 1 1 Unfavorable responses 17 8 10 6 10 Infavorable responses 17 8 10 6 10 Completely agree 17 10 C	0	0	0	5	1	0					
	Disagree	3	3	3	5	2	7	2	6	5	2
	Unfavorable responses	5	4	5	6	5	8	2	12	7	2
2014/2015	Agree	17	16	13	13	16	16	12	14	15	11
	Strongly agree	24	28	17	19	21	18	15	17	16	21
	Completely agree	53	52	65	61	58	57	70	56	61	65
	Favorable responses	94	95	95	93	95	91	98	87	92	97
	No opinion	1	1	0	1	1	1	1	1	1	1
	Unfavorable responses	17	8	10	6	10	12	1	16	10	5
2013/2014	Favorable responses	83	92	90	94	90	88	98	84	88	93
	No opinion	0	0	0	0	0	1	1	0	2	2

4TH YEAR

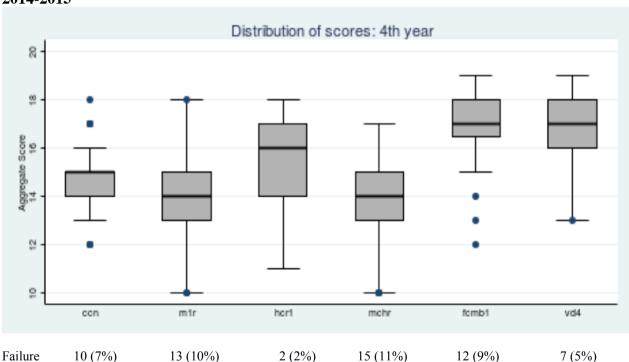
	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS	AVAILABLE
	SC-CSH	Health Centre Residency I	8	\checkmark
ar	C	Medicine I Residency	17	\checkmark
4th year	C	Maternal and Child Health Residency	17	\checkmark
4tl	C	Clinical Neurosciences	10	\checkmark
	C/P/CBB	From the Clinic to Molecular Biology I	3	\checkmark
	CBB / SC-CSH / P / C	Option Projects III	4	\checkmark
	SC-CSH	Vertical Domains IV	1	\checkmark
		TOTAL	60	

DISTRIBUTION OF STUDENT SCORES (*)

2013-2014



2014-2015



Legend

CCN – Clinical Neurosciences

M1R – Medicine I Residency

OP3 – Option Project III

HCR1 – Health Centres Residency I

MCHR – Maternal and Child Health Residency

FCMB1 - From Clinical to Molecular Biology I

VD4 – Vertical Domains IV

(*) Output provided by the database of ECS-UM Longitudinal Study

CURRICULAR UNIT: MEDICINE I RESIDENCY

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	0	1	0	1	2	0	0	0	0	0
	Strongly disagree	0	1	0	11	4	2	3	1	0	3		0
	Disagree	2	4	1	16	11	9	4	5	4	4	7	1
	Unfavorable responses	2	5	1	28	16	11	9	6	4	7	8	1
2014/2015	Agree	20	33	23	34	38	34	43	38	34	44	39	24
	Strongly agree	54	46	41	31	33	38	38	39	47	36	34	47
	Completely agree	25	15	34	8	10	16	9	16	12	12	18	27
	Favorable responses	98	95	99	72	81	88	91	93	94	92	91	98
	No opinion	0	0	0	0	3	1	1	1	2	1	2	1
	Unfavorable responses	6	9	4	33	22	12	17	11	6	9	14	4
2013/2014	Favorable responses	91	89	94	64	77	83	79	85	89	84	81	94
	No opinion	2	2	2	2	1	5	4	4	5	7	5	2

Tutors/Service	ces	1	2	3	4	5	6	7	8	9	10
	Completely disagree	1	0	1	1	2	2	0	2	1	0
	Strongly disagree	0	1	0	0	1	0	0	2	1	1
	Disagree	5	5	3	1	3	8	0	6	2	3
	Unfavorable responses	6	6	4	2	6	11	1	9	5	4
2014/2015	Agree	13	15	12	15	16	23	10	15	15	15
	Strongly agree	29	32	24	26	29	26	23	25	27	25
	Completely agree	50	46	58	55	47	37	65	49	50	54
	Favorable responses	93	93	94	96	92	85	97	89	93	95
	No opinion	1	1	2	2	2	4	2	2	2	1
	Unfavorable responses	10	11	10	8	12	15	4	17	13	7
2013/2014	Favorable responses	88	87	87	89	85	77	92	81	83	91
	No opinion	2	2	3	4	3	9	4	2	4	2

CURRICULAR UNIT: CLINICAL NEUROSCIENCES

Overall Evaluation

Curricular U	Init (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	1	7	1	3	3	0	1	1	3	1
	Strongly disagree	0	3	0	6	4	2	8	3	0	1	1	1
	Disagree	4	6	1	11	10	5	18	7	9	11	4	1
	Unfavorable responses	4	9	2	25	15	10	28	10	10	12	8	3
2014/2015	Agree	21	27	24	35	41	39	30	31	34	34	35	24
2014/2013	Strongly agree	58	54	43	27	32	34	31	45	41	37	40	45
	Completely agree	16	10	31	12	11	18	11	14	12	16	17	29
	Favorable responses	96	91	98	75	84	90	72	90	88	87	92	97
	No opinion	1	0	0	1	1	0	0	0	3	1	0	0
	Unfavorable responses	3	5	4	19	18	6	13	5	13	9	8	3
2013/2014	Favorable responses	98	95	96	80	81	94	86	95	86	88	88	95
	No opinion	0	0	0	1	1	0	1	0	1	4	5	3

Tutors/Service	ces	1	2	3	4	5	6	7	8	9	10
	Completely disagree	0	0	1	1	1	1	0	1	1	1
	Strongly disagree	0	3	1	0	1	4	0	4	3	2
	Disagree	4	5	4	4	7	6	3	5	5	3
	Unfavorable responses	5	8	7	5	9	11	3	10	9	6
2014/2015	Agree	16	13	9	11	13	17	7	12	10	12
	Strongly agree	25	18	15	16	17	18	16	17	18	18
	Completely agree	52	59	69	67	60	50	73	60	62	63
	Favorable responses	93	91	92	94	90	85	96	89	90	93
	No opinion	1	1	1	1	1	4	1	1	1	1
	Unfavorable responses	6	5	4	3	4	6	1	7	5	2
2013/2014	Favorable responses	94	95	96	97	96	88	98	93	62 90	98
	No opinion	0	0	0	0	0	6	1	0	1	0

CURRICULAR UNIT: HEALTH CENTRES RESIDENCY I

Overall Evaluation

Curricular U	Init (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	2	5	3	10	2	3	4	1	3	6	8	6
	Strongly disagree	8	7	6	5	7	7	10	8	5	3	8	8
	Disagree	8	12	23	19	16	16	32	15	16	16	24	15
	Unfavorable responses	18	24	32	34	25	26	46	24	24	25	40	29
2014/2015	Agree	47	40	36	31	39	35	30	40	37	40	34	35
	Strongly agree	18	21	17	26	16	21	15	29	27	19	17	21
	Completely agree	16	14	14	8	15	18	8	7	8	13	6	11
	Favorable responses	81	75	67	65	71	74	53	76	73	73	57	67
	No opinion	1	1	1	1	4	0	1	0	3	2	3	4
	Unfavorable responses	6	8	13	22	5	10	35	8	18	16	30	16
2013/2014	Favorable responses	92	91	84	75	92	86	64	91	75	79	66	81
	No opinion	1	1	3	3	3	4	1	1	6	5	4	4

Evaluation of Clinical Tutors/Services

not applicable

CURRICULAR UNIT: MATERNAL AND CHILD HEALTH RESIDENCY

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	6	1	4	18	9	7	5	7	8	6	5
	Strongly disagree	4	8	2	8	19	6	6	6	2		0	
	Disagree	10	13	4	27	20	14	21	12	16	12	15	1
	Unfavorable responses	15	26	7	38	58	28	34	22	25	22	26	6
2014/2015	Agree	29	35	24	31	31	38	38	46	42	39	38	38
	Strongly agree	42	31	38	19	9	23	18	25	23	27	23	36
	Completely agree	15	9	31	11	1	9	9	6	7	10	11	20
	Favorable responses	85	74	93	61	41	70	65	77	72	76	72	93
	No opinion	0	0	0	1	1	2	1	1	3	2	2	1
	Unfavorable responses	5	10	2	31	33	17	19	10	10	9	7	0
2013/2014	Favorable responses	95	90	98	69	67	79	81	88	88	90	93	98
	No opinion	0	0	0	0	0	3	0	2	2	2	0	2

Tutors/Service	ces	1	2	3	4	5	6	7	8	9	10
	Completely disagree	3	3	3	3	3	4	2	6	3	3
	Strongly disagree	2	3	1	2	3	2	1	4	2	2
	Disagree	8	5	4	2	8	6	1	7	4	2
	Unfavorable responses	13	11	8	7	14	13	4	17	9	7
2014/2015	Agree	20	19	18	17	17	16	13	14	17	21
	Strongly agree	26	26	24	26	25	28	29	22	22	27
	Completely agree	40	42	49	47	42	39	51	45	48	43
	Favorable responses	86	87	90	90	83	83	93	81	86	91
	No opinion	1	2	2	3	3	4	4	2	5	2
	Unfavorable responses	10	9	8	7	12	14	4	12	8	5
2013/2014	Favorable responses	90	91	92	92	87	85	96	87	90	94
	No opinion	0	0	1	1	1	2	0	1	1	0

CURRICULAR UNIT: FROM CLINICAL TO MOLECULAR BIOLOGY I

Curricular U	Curricular Unit (nuclear items)		2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	2	2	3	11	3	5	5	4	6	1	5	6
	Strongly disagree	8	4	2	13	5	10	8	4	10	4	10	7
	Disagree	18	22	27	30	15	15	23	14	24	8	31	31
	Unfavorable responses	28	28	32	54	23	30	35	22	40	12	46	44
2014/2015	Agree	46	45	40	33	49	44	40	49	36	50	41	33
	Strongly agree	16	17	17	9	14	14	13	16	13	21	8	16
	Completely agree	10	9	10	4	10	9	10	11	6	14	5	6
	Favorable responses	72	70	67	45	72	67	64	76	54	85	53	55
	No opinion	0	2	1	1	5	4	1	2	6	3	1	1
	Unfavorable responses	14	13	14	23	9	14	13	13	21	5	25	18
2013/2014	Favorable responses	86	84	86	77	84	80	88	86	75	88	73	80
	No opinion	0	4	0	0	7	5	0	2	4	7	2	2

CURRICULAR UNIT: OPTION PROJECTS III

Curricular Uni	urricular Unit (specific items)		2	3	4	5	6	7	8
	Completely disagree	0	0	0	0	7	1	0	2
	Strongly disagree	0	0	1	1	2	0	1	0
	Disagree	3	4	5	4	15	3	1	2
2014/2015	Unfavorable responses	3	4	6	5	24	4	2	4
	Agree	17	18	18	24	27	32	14	19
	Strongly agree	32	34	37	30	25	22	26	28
	Completely agree	46	35	33	38	23	43	58	49
	Favorable responses	96	88	89	92	76	96	98	96
	No opinion	1	8	5	3	0	0	0	0
	Unfavorable responses	4	4	6	11	23	10	2	4
2013/2014	Favorable responses	96	94	93	88	75	85	98	96
_	No opinion	0	2	2	1	2	6	0	0

CURRICULAR UNIT: VERTICAL DOMAINS IV

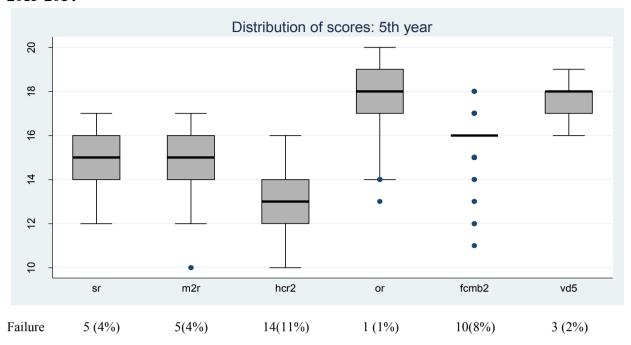
Curricular U	Init (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	3	2	3	2	-	2	2	2	-	2	3
	Strongly disagree	4	1	1	0	1	-	3	0	1	-	1	3
	Disagree	6	6	17	16	11	-	11	9	9	-	9	14
	Unfavorable responses	11	10	20	19	14	-	16	11	12	-	12	20
2014/2015	Agree	41	45	43	40	45	-	46	48	38	-	45	46
	Strongly agree	32	30	23	26	22	-	24	25	26	-	28	19
	Completely agree	16	15	13	14	14	-	13	14	19	-	13	10
	Favorable responses	89	90	79	81	82	-	84	87	83	-	86	76
	No opinion	0	0	1	0	4	-	0	2	5	-	2	4
	Unfavorable responses	10	10	18	14	13		13	8	10		13	22
2013/2014	Favorable responses	88	87	80	83	81		86	91	82		84	75
	No opinion	2	3	2	3	6		2	2	8		2	3

5TH YEAR

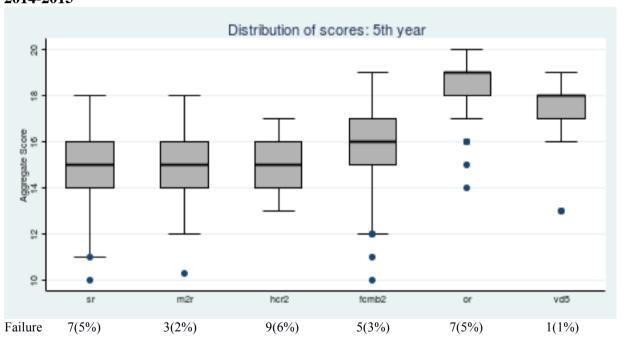
	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS	AVAILABLE
	SC-CSH	Health Centre Residency II	13	\checkmark
ar	C	Surgery Residency	18,5	\checkmark
ı year	C	Medicine II Residency	16	\checkmark
5th	C	Optional Residencies	8,5	\checkmark
	C/P/CBB	From the Clinic to Molecular Biology II	3	\checkmark
	SC-CSH	Vertical Domains V	1	\checkmark
		TOTAL	60	

DISTRIBUTION OF STUDENT SCORES(*)

2013-2014



2014-2015



Legend

SR – Surgery Residency

M2R – Medicine II Residency

HCR2 – Health Centres Residency II

OR - Optional Residencies

FCMB2 - From Clinical to Molecular Biology II

VD5 - Vertical Domains V

^(*) Output provided by the database of ECS-UM Longitudinal Study

CURRICULAR UNIT: SURGERY RESIDENCY

Overall Evaluation

Curricular Un	it (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	2	1	10	2	2	7	2	1	2	1	2
	Strongly disagree	1	2	1	14	4	2	7	1	2	1	3	1
	Disagree	1	10	3	23	18	17	19	12	10	12	18	5
	Unfavorable responses	2	14	4	46	24	20	32	15	12	16	22	7
2014/2015	Agree	38	44	27	24	41	41	40	43	46	48	41	34
	Strongly agree	46	32	44	21	22	27	21	32	31	27	27	33
	Completely agree	14	10	25	7	3	10	7	9	7	6	7	25
	Favorable responses	98	85	96	53	66	78	67	84	83	81	75	93
	No opinion	0	1	0	1	10	2	1	1	5	3	3	0
	Unfavorable responses	8	13	6	38	21	21	38	17	15	23	21	6
2013/2014	Favorable responses	90	85	92	60	77	77	60	79	81	75	77	90
	No opinion	2	2	2	2	2	2	2	4	4	2	2	4

Tutors/Service	es	1	2	3	4	5	6	7	8	9	10
	Completely disagree	1	1	1	1	2	2	1	2	1	1
	Strongly disagree	1	1	1	1	2	2	0	2	1	1
	Disagree	6	6	4	2	7	6	1	7	5	3
	Unfavorable responses	9	8	6	4	10	10	2	11	7	6
2014/2015	Agree	15	15	14	14	18	21	9	15	17	15
	Strongly agree	26	28	27	28	26	22	25	25	27	28
	Completely agree	48	47	51	51	43	40	61	47	46	49
	Favorable responses	90	90	92	93	87	84	95	86	89	93
	No opinion	2	2	2	3	3	6	3	2	3	2
	Unfavorable responses	9	9	5	5	11	11	2	12	7	6
2013/2014	Favorable responses	91	90	94	93	87	85	95	87	90	94
	No opinion	0	1	2	2	2	4	2	1	3	0

CURRICULAR UNIT: MEDICINE II RESIDENCY

Overall Evaluation

Curricular U	Curricular Unit (nuclear items)		2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	0	1	12	2	1	3	1	1	1	3	1
	Strongly disagree	0	0	0	19	5	5	2	0	1	1	1	1
	Disagree	2	12	1	20	23	13	19	14	3	10	15	4
	Unfavorable responses	2	12	2	52	30	19	24	15	5	11	18	5
2014/2015	Agree	34	36	27	21	34	39	40	44	43	47	44	43
	Strongly agree	47	41	47	21	29	26	26	33	37	32	27	32
	Completely agree	17	9	24	6	4	14	9	7	11	5	5	19
	Favorable responses	98	86	98	48	67	79	75	84	92	84	77	94
	No opinion	0	2	0	0	3	2	1	1	3	4	5	1
	Unfavorable responses	9	19	7	56	23	19	23	16	12	14	14	7
2013/2014	Favorable responses	91	81	93	44	72	81	77	81	86	86	86	93
	No opinion	0	0	0	0	5	0	0	2	2	0	0	0

Tutors/Servi	ces	1	2	3	4	5	6	7	8	9	10
2014/2015	Completely disagree Strongly disagree Disagree Unfavorable responses Agree Strongly agree Completely agree Favorable responses No opinion					In Pr	ocess				
	Unfavorable responses	13	7	6	6	9	11	2	9	6	7
2013/2014	Favorable responses	84	91	92	92	86	78	94	87	89	91
	No opinion	3	2	2	2	5	11	3	4	4	2

CURRICULAR UNIT: HEALTH CENTRES RESIDENCY II

Overall Evaluation

Curricular U	Curricular Unit (nuclear items)		2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	2	0	1	1	0	4	0	1	3	2	1
	Strongly disagree	0	2	1	3	5	5	6	5	2	2	2	0
	Disagree	6	16	2	16	13	8	21	10	5	12	11	1
	Unfavorable responses	7	20	3	20	18	12	30	14	8	17	14	2
2014/2015	Agree	30	32	15	30	37	35	40	41	36	42	43	34
	Strongly agree	30	26	43	29	26	27	17	29	26	23	27	30
	Completely agree	32	21	38	21	16	25	12	14	30	15	14	33
	Favorable responses	93	79	97	80	79	87	70	84	92	80	85	98
	No opinion	0	1	0	0	3	1	0	2	0	3	1	0
	Unfavorable responses	34	75	15	23	87	47	75	55	17	57	60	26
2013/2014	Favorable responses	66	25	85	75	13	45	25	43	83	40	36	74
	No opinion	0	0	0	2	0	8	0	2	0	4	4	0

Tutors/Servic	Tutors/Services		2	3	4	5	6	7	8	9	10
	Completely disagree	1	0	0	0	0	0	0	0	0	0
	Strongly disagree	1	0	0	0	0	1	0	0	0	0
	Disagree	2	0	1	2	2	2	2	1	2	0
	Unfavorable responses	4	0	1	2	2	3	2	1	2	0
2014/2015	Agree	8	11	5	8	7	7	7	5	5	7
	Strongly agree	23	17	17	19	17	17	19	14	19	23
	Completely agree	65	73	77	71	74	74	73	81	74	70
	Favorable responses	96	100	99	98	98	97	98	99	98	100
	No opinion	0	0	0	0	0	0	0	0	0	0
	Unfavorable responses	3	3	1	1	0	1	1	2	3	2
2013/2014	Favorable responses	97	97	99	99	100	99	99	98	97	98
	No opinion	0	0	0	0	0	0	0	0	0	0

CURRICULAR UNIT: OPTIONAL RESIDENCIES

Curricular U	Curricular Unit (nuclear items)		2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	-	0	-	-	0	-	-	1	-	0	0
	Strongly disagree	1	-	0	-	-	0	-	-	0	-	0	0
	Disagree	0	-	1	-	-	4	-	-	3	-	0	1
	Unfavorable responses	2	-	1	-	-	4	-	-	4	-	0	1
2014/2015	Agree	9	-	8	-	-	10	-	-	11	-	9	5
	Strongly agree	33	-	27	-	-	31	-	-	33	-	21	26
	Completely agree	56	-	64	-	-	53	-	-	51	-	70	68
	Favorable responses	98	-	99	-	-	94	-	-	95	-	100	99
	No opinion	0	-	0	-	-	2	-	-	1	-	0	0
	Unfavorable responses	5	-	3	-	-	9	-	-	10	-	5	2
2013/2014	Favorable responses	95	-	97	-	-	88	-	-	88	-	95	98
	No opinion	0	-	0	-	-	3	-	-	2	-	0	0

CURRICULAR UNIT: FROM CLINICAL TO MOLECULAR BIOLOGY II

Curricular Unit (urricular Unit (nuclear items)		2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	1	1	4	6	2	1	2	3	2	1	4	4
	Strongly disagree	2	1	6	2	2	2	1	1	2	0	7	6
	Disagree	7	9	12	14	5	7	7	4	6	4	18	12
	Unfavorable responses	9	11	21	21	9	10	10	7	9	5	28	22
2014/2015	Agree	33	34	35	33	31	32	28	29	32	29	40	40
	Strongly agree	32	34	28	32	33	29	36	36	32	38	20	25
	Completely agree	26	21	15	14	16	23	26	22	25	25	9	12
	Favorable responses	91	88	78	79	79	84	90	87	89	92	69	76
	No opinion	0	1	1	0	12	6	0	6	2	4	3	2
	Unfavorable responses	13	16	16	6	13	16	16	16	19	10	29	19
2013/2014	Favorable responses	87	84	84	94	84	81	84	77	77	87	68	81
	No opinion	0	0	0	0	3	3	0	6	3	3	3	0

CURRICULAR UNIT: VERTICAL DOMAINS V

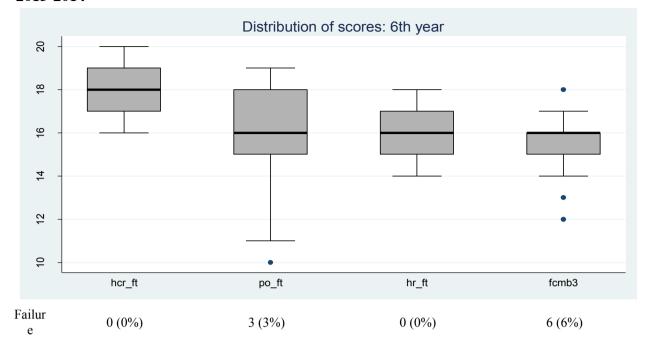
Curricular Ur	nit (nuclear items)	1	2	3	4	5	6	7	8	9 10		11	12
2014/2015	Completely disagree	0	0	1	2	0	-	0	1	0	-	1	1
	Strongly disagree	4	4	5	5	4	-	6	3	3	-	6	6
	Disagree	4	6	8	7	11	-	6	3	4	-	5	13
	Unfavorable responses	8	10	13	13	15	-	11	7	7	-	11	20
	Agree	27	34	34	37	30	-	32	36	25	-	30	29
	Strongly agree	36	30	30	29	33	-	33	32	33	-	28	31
	Completely agree	29	25	20	20	18	-	22	24	30	-	29	17
	Favorable responses	91	89	84	86	82	-	88	92	89	-	87	77
	No opinion	1	2	3	1	3	-	1	1	5	-	2	3
2013/2014	Unfavorable responses	6	10	9	5	12		6	3	8		10	17
	Favorable responses	94	89	90	93	85		91	94	88		90	83
	No opinion	0	2	1	2	3		3	3	4		0	0

6TH YEAR

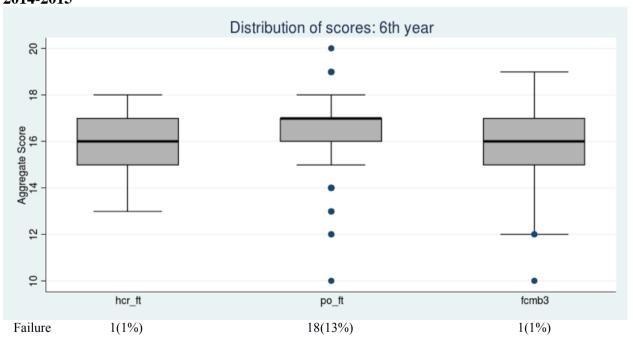
	SCIENTIFIC AREA	CURRICULAR UNITS	ECTS	AVAILABLE
5th year	SC-CSH	Health Centre Residency - Final Training	10,5	\checkmark
	C	Hospital Residencies - Final Training	39,5	\checkmark
	C/P/CBB	C / P / CBB From the Clinic to Molecular Biology III		\checkmark
	CBB / SC-CSH / P / C	Option Projects - Final Training	7	\checkmark
		TOTAL	60	

DISTRIBUTION OF STUDENT SCORES(*)

2013-2014



2014-2015



Legend

HCR_FT – Health Centres Residency - Final Training

PO_FT - Option Projects - Final Training

HR_FT – Hospital Residencies - Final Training

FCMB3 – From Clinical to Molecular Biology III

(*) Output provided by the database of ECS-UM Longitudinal Study.

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	0	2	0	1	2	1	2	2	0	4	3	1
	Strongly disagree	2	5	1	4	5	6	7	4	2	4	3	2
	Disagree	6	15	4	3	17	12	15	8	4	11	14	4
	Unfavorable responses	8	22	5	8	23	19	24	14	5	20	19	7
2014/2015	Agree	26	33	18	30	30	36	29	32	22	39	31	27
	Strongly agree	35	24	33	32	28	23	28	32	43	23	31	30
	Completely agree	31	21	43	30	17	21	19	23	29	16	17	36
	Favorable responses	92	78	95	92	76	81	76	86	95	78	79	93
	No opinion	0	0	0	0	1	1	0	0	0	2	2	0
	Unfavorable responses	0	14	0	5	5	5	32	5	5	18	0	0
2013/2014	Favorable responses	100	86	100	95	95	95	64	95	95	82	100	100
	No opinion	0	0	0	0	0	0	5	0	0	0	0	0

Evaluation of Clinical Tutors/Services

Tutors/Servi	ces	1	2	3	4	5	6	7	8	9	10			
	Completely disagree													
	Strongly disagree													
	Disagree													
	Unfavorable responses													
2014/2015	Agree		In process											
	Strongly agree													
	Completely agree													
	Favorable responses No opinion													
	Unfavorable responses	1	4	4	5	4	2	4	5	5	3			
2013/2014	Favorable responses	99	96	96	95	94	96	95	95	94	98			
	No opinion	0	0	0	0	2	1	1	0	1	0			

CURRICULAR UNIT: HOSPITAL RESIDENCIES - FINAL TRAINING

Overall Evaluation

Curricular U	nit (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
	Completely disagree	2	2	2	4	2	4	4	3	2	2	3	1
	Strongly disagree	0	2	1	1	1	1	0	2	1	1	1	2
	Disagree	5	7	1	4	7	5	0	0	0	2	2	0
	Unfavorable responses	7	11	4	9	10	10	4	5	3	5	6	3
2014/2015	Agree	20	31	20	24	31	35	38	34	24	27	27	25
	Strongly agree	42	34	36	37	27	27	37	32	42	41	46	38
	Completely agree	31	25	40	29	25	25	18	25	32	20	21	33
	Favorable responses	93	89	96	91	83	87	93	92	97	88	94	97
	No opinion	0	0	0	0	7	3	3	3	0	7	0	0
	Unfavorable responses	0	0	7	0	14	0	0	0	7	0	0	0
2013/2014	Favorable responses	93	93	86	93	71	79	86	79	86	79	93	93
	No opinion	7	7	7	7	14	21	14	21	7	21	7	7

Evaluation of Clinical Tutors/Services

Tutors/Service	ces	1	2	3	4	5	6	7	8	9	10
	Completely disagree										
	Strongly disagree										
	Disagree										
	Unfavorable responses										
2014/2015	Agree					In p	rocess				
	Strongly agree										
	Completely agree										
	Favorable responses										
	No opinion										
	Unfavorable responses	7	7	5	5	8	11	3	12	8	6
2013/2014	Favorable responses	92	91	92	93	90	86	94	87	88	92
	No opinion	1	2	3	3	2	3	2	1	4	2

CURRICULAR UNIT: FROM CLINICAL TO MOLECULAR BIOLOGY III

Overall Evaluation

Curricular Uni	t (nuclear items)	1	2	3	4	5	6	7	8	9	10	11	12
Completely disagree		1	1	2	1	3	3	1	3	2	2	5	5
	Strongly disagree	3	3	3	5	4	1	1	0	0	1	6	4
	Disagree	10	7	11	11	7	8	8	6	12	6	10	10
	Unfavorable responses	14	11	16	17	14	12	10	9	14	9	20	18
2014/2015	Agree	34	30	36	30	31	37	35	29	31	34	44	39
	Strongly disagree	31	31	29	28	25	26	33	38	35	29	24	28
	Completely agree	19	24	19	24	26	17	19	20	17	24	11	13
	Favorable responses	84	84	83	83	82	80	88	87	83	87	79	80
	No opinion	2	5	1	1	4	8	2	4	3	4	1	2
	Unfavorable responses	46	50	50	23	54	31	27	23	31	23	65	62
2013/2014	Favorable responses	50	38	46	65	35	54	69	65	54	65	27	27
	No opinion		12	4	12	12	15	4	12	15	12	8	12

CURRICULAR UNIT: OPTION PROJECTS - FINAL TRAINING

Overall Evaluation

Curricular U	nit	1	2	3	4	5	6	7	8
	Completely disagree	0	8	6	5	49	8	1	2
	Strongly disagree	2	6	5	3	17	5	1	4
	Disagree	0	6	4	5	11	13	3	8
	Unfavorable responses	2	21	16	14	77	26	5	15
2014/2015	Agree	20	22	26	21	4	19	16	25
	Strongly agree	40	35	32	33	10	24	46	32
	Completely agree	38	22	25	31	9	26	33	26
	Favorable responses	97	79	83	85	22	69	95	83
	No opinion	1	0	1	1	1	5	0	2
	Unfavorable responses	1	6	6	12	86	24	4	12
2013/2014	Favorable responses	98	80	83	85	14	71	96	84
	No opinion	1	13	11	2	0	5	0	4

STUDENTS A	DMITED/R	EGISTERE	D 2014/201	15	

PURPOSE

This document presents a socio-demographic descriptive analysis of the students registered in the Medical degree of the School of Health Sciences of University of Minho. The document compares the new class of 2014/2015 incoming students with all students from previous years, offering a perspective on the evolution of the sociodemography of Minho's students. Medical Education Unit collected the data at the moment of students' admission, as part of the Longitudinal Study of the School of Health Sciences.

ORGANIZATION

The document presents tables with descriptive statistics (number and percentage) for individual socio-demographic variables. The tables also present the numbers and sample (representativeness) rates for individual cohorts, and for the total sample, in the columns shaded in grey (Sample (representativeness)). Rates below 100% reflect the existence of "missing values" in the longitudinal study data.

Table 1 shows the total numbers to consider (for students with valid registrations) in the calculation of the percentage of collection of variables (excluding Table 2 and Table 3).

In order to compare students who entered medical school in the academic year 2014/2015 with all students who entered the school years earlier, and since no significant differences were found between the various classes¹, a single group was formed with students who entered medical school between the academic years 2001/2002 and 2013/2014.

This document presents descriptive statistics for the original track and the alternative track².

Used abbreviations:

SHS/UM – School of Health Sciences of University of Minho

NAP - National Admission Process

SAR - Special Admission Regimes

SAP - Special Admission Process

GPA - Grade Point Average

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Available in the document "A Snapshot, assessment of the academic year: October, 2012.

² Starting 2011/2012 years 1, 2 and 3 of the Medical degree of the School of Health Sciences (corresponding to the degree in Basic Sciences of the Medicine) are organized in 2 distinct Study Plans: (1) Original Track: for students who had not been admitted to the track of Medicine through the Graduate Entry Process to the track of Medicine for graduates; (2) Alternative Track: for the students who had been admitted to the track of Medicine the Special Admission Process to the track of Medicine for graduates (Decreto-Lei n.º 40/2007 de 20 de Fevereiro).

REFERENCE SAMPLE: REGISTERED STUDENTS

Table 1: Population totals used in representativeness calculations across the document

Track	Forms of Admission		sion academi	•
	1 01110 01 1 24111001011		2014/2015	Total
	NAP: general contingent – 1 st phase	1024	118	1142
	NAP: general contingent – 2 nd phase	15	1	16
	NAP: general contingent – 3 rd phase	3	0	3
	NAP: general contingent - complaints	2	0	2
	NAP: general contingent	1044	119	1163
	NAP: islands contingent– 1st phase	59	2	61
	NAP: handicapped contingent– 1st phase	15	2	17
	NAP: emigrants contingent– 1 st phase	20	0	20
	NAP: military contingent– 1 st phase	4	0	4
	NAP: other contingents: complaints	4	0	4
Original	NAP: All contingents – 1st phase	1122	122	1244
0.1.8	Total National Admission Process	1146	123	1269
	SAR: athletes	15	0	15
	SAR: diplomats	3	1	4
	SAR: Portuguese Speaking African Countries	6	1	7
	SAR: Timor	1	0	1
	SAR: Total	25	2	27
	SAP: graduates	24	0	24
	Transfers	6	0	6
	Reinstatement	3	0	3
	Extraordinary Legislation	2	0	2
	Total of other processes of admission	60	2	62
	Total	1206	125	1331
Alternative	SAP: graduate-entry students**	56	18	74
	Reinstatement	1	0	1
	Aveiro	10	0	10
	Total	67	18	85
Original & Alternative	Total	1273	143	1416

^{*} the alternative track began in 2011/2011.

RESULTS

A. ORIGINAL AND ALTERNATIVE TRACKS A.1. ADMITTED STUDENTS

Table 2: Admitted students: all

		Acade	mic Ye	ar of Adm	nission	
	2001	/2014	2014	1/2015	Тс	tal
	N	%	N	%	N	%
NAP: general contingent	1073	82%	120	83%	1193	82%
NAP: general contingent – 1 st phase	1052	80%	119	83%	1171	81%
NAP: general contingent – 2 nd phase	16	1%	1	1%	17	1%
NAP: general contingent – 3 rd phase	3	0%	0	0%	3	0%
NAP: general contingent – complaints	2	0%	0	0%	2	0%
NAP: islands contingent	60	5%	2	1%	62	4%
NAP: handicapped contingent	18	1%	2	1%	20	1%
NAP: emigrants contingent	21	2%	0	0%	21	1%
NAP: military contingent	4	0%	0	0%	4	0%
NAP: All contingents – 1st phase	1152	88%	123	85%	1275	88%
NAP: All contingents – 2 nd phase	16	1%	1	1%	17	1%
NAP: All contingents – 3 rd phase	3	0%	0	0%	3	0%
NAP: All contingents – complaints	6	0%	0	0%	6	0%
Total National Admission Process	1176	90%	124	86%	1300	89%
SAR: athletes	15	1%	0	0%	15	1%
SAR: diplomats	3	0%	1	1%	4	0%
SAR: Portuguese Speaking African Countries	6	0%	1	1%	7	0%
SAR: Timor	1	0%	0	0%	1	0%
SAP: graduates	87	6%	18	13%	105	7%
Reinstatement	4	0%	0	0%	4	0%
Transfers	16	1%	0	0%	16	1%
Extraordinary legislation	2	0%	0	0%	2	0%
Total of other processes of admission	134	9%	2	1%	136	9%
Sample (representativeness)	1310	100%	144	100%	1454	100%

Table 3: Admitted students: registrations

		Acader	nic Yea	r of Adı	nission	
	2001/	2014	2014	/2015	To	tal
	N	%	N	%	N	%
Did not register	12	1%	1	1%	13	1%
Registered but applied for transfer during the 1st year	9	1%	0	0%	9	1%
Registered but changed degrees in another phase of the NAP	9	1%	0	0%	9	1%
Registered but cancelled registration	7	1%	0	0%	7	0%
Total of invalid registrations	37	3%	1	1%	38	3%
Total of valid registrations	1273*	97%	143	99%	1416	97%
Sample (representativeness)	1310	100%	144	100%	1454	100%

^{*} Includes Readmission: 2 in 2011/2012; 1 in 2012/2013; 1 in 2013/2014

A.2. REGISTERED STUDENTS

Table 4: Admission Process

		Acade	mic Ye	ar of Adm	nission	
	2001	/2014	2014	4/2015	Тс	tal
	N	%	N	%	N	%
NAP: general contingent	1044	82%	119	83%	1163	82%
NAP: islands contingent	60	5%	2	1%	62	4%
NAP: handicapped contingent	18	1%	2	1%	20	1%
NAP: emigrants contingent	20	2%	0	0%	20	1%
NAP: military contingent	4	0%	0	0%	4	0%
Total National Admission Process	1146	90%	123	86%	1269	90%
SAR: athletes	15	1%	0	0%	15	1%
SAR: diplomats	3	0%	1	1%	4	0%
SAR: Portuguese Speaking African Countries	6	0%	1	1%	7	0%
SAR: Timor	1	0%	0	0%	1	0%
SAP: graduates	80	6%	18	13%	98	7%
Reinstatement	4	0%	0	0%	4	0%
Transfers	16	1%	0	0%	16	1%
Extraordinary legislation	2	0%	0	0%	2	0%
Total of other processes of admission	127*	10%	20	14%	147	10%
Sample (representativeness)	1273*	100%	143	100%	1416	100%

^{*} Includes Readmission: 2 in 2011/2012; 1 in 2012/2013; 1 in 2013/2014

B. ORIGINAL TRACK

B.1. NATIONAL ADMISSION PROCESS: 1ST PHASE: REGISTERED STUDENTS

Table 5: Students' option for SHS/UM: all NAP contingents: (The SHS/UM was my # option)

Academic Year of Admission	1st o	1st option		2nd option		3rd option		option	Sample (representativeness)		
7 Kullission	N	%	N	%	N	%	N	%	N	%	
2001/2014	788	70%	130	12%	185	16%	19	2%	1122	100%	
2014/2015	69	57%	26	21%	26	21%	1	1%	122	100%	
Total	857	69%	156	13%	211	17%	20	2%	1244	100%	

Table 6: Students' option for SHS/UM: NAP general contingent (The SHS/UM was my # option)

Academic Year of	1st o	1st option		2nd option		3rd option		option	Sample (representativeness)		
Admission	N	%	N	%	N	%	N	%	N	%	
2001/2014	742	72%	99	10%	179	17%	4	0%	1024	100%	
2014/2015	67	57%	25	21%	26	22%	0	0%	118	100%	
Total	809	71%	124	11%	205	18%	4	0%	1142	100%	

Table 7: Grade point average: all contingents

Academic Year of Admission	Mean	Standard deviation	Minimum	Maximum	Sample (representativene N %			
2001/2014	183,91	7,56	140,20	197,30	1122	100%		
2014/2015	181,57	4,10	167,20	195,00	122	100%		
Total	183,69	7,33	140,20	197,30	1244	100%		

Table 8: Grade point average: general contingent

Academic Year of	Maan	Standard	Minimum	Maximum	Sample (repre	esentativeness)
Admission	Mean	deviation	IVIIIIIIIIIIIIII	Maximum	N	%
2001/2014	185,80	3,41	179,20	197,30	1024	100%
2014/2015	181,77	3,76	178,70	195,00	118	100%
Total	185,39	3,66	178,70	197,30	1142	100%

Table 9: Type of secondary school where the student completed the 12th year: all contingents

Academic Year of	pul	olic	priv	/ate	Sample (representativeness)		
Admission	N	%	N	%	N	%	
2001/2014	526	68%	245	32%	771	69%	
2014/2015	66	59%	46	41%	112	92%	
Total	592	67%	291	33%	883	71%	

Table 10: Type of secondary school where the student completed the 12th year: general contingent

Tueste To. Type of S	erenam j semeer	ondury sensor where the student completes the 12th year. Beneral continuent									
Academic Year of	pul	olic	priv	vate	Sample (representativeness)						
Admission	N	%	N	%	N	%					
2001/2014	482	68%	227	32%	709	69%					
2014/2015	64	59%	44	41%	108	91%					
Total	546	67%	271	33%	817	72%					

B.2. ALL ADMISSION PROCESSES: ALL REGISTERED STUDENTS

Table 11: Students' Gender

Academic Year of	Female		Ma	ale	Sample (representativeness)		
Admission	N	%	N	%	N	%	
2001/2014	799	66%	407	34%	1206	100%	
2014/2015	85	68%	40	32%	125	100%	
Total	883	66%	447	34%	1330	100%	

Table 12: Students' age

		Academic Year of Admission																
		2001/2014				2014/2015				Total								
	N	%	M	DP	Min	Max	N	%	M	DP	Min	Max	N	%	M	DP	Min	Max
NAP	1118	95%	18.78	1.40	16	38	100	98%	18.57	1.24	17	29	1218	95%	18.78	1.39	16	38
SAR	25	2%	18.46	0.84	17	21	2	2%	17.52	0.69	17	18	27	2%	18.41	0.86	17	21
SAP: graduated	23	2%	28.57	3.32	24	40	0	0%	-	-	-	-	23	2%	28.57	3.32	24	40
Transfers and Reinstatement	8	1%	24.14	4.31	17	29	0	0%	-	-	-	-	8	1%	24.14	4.31	17	29
Extraordinary legislation	2	0%	18.84	0.15	18	18	0	0%	-	-	-	-	2	0%	18.84	0.15	18	18
Sample (representativeness)	1176	98%	19.01	2.06	16	40	102	82%	18.55	1.24	17	29	1278	96%	18.98	2.01	16	40

Table 13: Students' nationality

			Academic Ye	ar of Admissic	n	
	200	1/2014	2014/	/2015	То	tal
	N	%	N	%	N	%
Canadian	5	0%	0	0%	5	0%
Danish	1	0%	0	0%	1	0%
Angolan	1	0%	0	0%	1	0%
American	1	0%	0	0%	1	0%
Russian	1	0%	0	0%	1	0%
Cape Verdean	2	0%	1	1%	3	0%
Timorese	1	0%	0	0%	1	0%
Santoméan	1	0%	0	0%	1	0%
Australian	1	0%	0	0%	1	0%
Cuban	1	0%	0	0%	1	0%
All other Nationalities	15	1%	1	1%	16	1%
Portuguese	1023	99%	117	99%	1140	99%
Sample (representativeness)	1038	86%	118	94%	1156	87%

Table 14: District of origin

Tuote 11. Bistifet of	8							
Academic Year of Admission	Bra	Braga		rto	Oth	ners	Sample (representativeness)	
7 (4 1111551011	N	%	N	%	N	%	N	%
2001/2014	702	59%	242	20%	244	21%	1188	99%
2014/2015	56	50%	31	27%	26	23%	113	90%
Total	758	58%	273	21%	270	21%	1301	98%

Table 15: Students' admission: moving away from the family home (Coming to the SHS/UM meant I had to leave the family home)

Academic Year of	N	[o	Y	es	Sample (representativeness)		
Admission	N	%	N		N	%	
2001/2014	582	51%	549	49%	1131	94%	
2014/2015	56	48%	61	52%	117	94%	
Total	638	51%	610	49%	1248	94%	

Table 16: Students' registration in higher education: 1st time

Tubic 10. Students	registration in i	ingher education	i. 15t tillic				
Academic Year of	N	lo	Y	es	Sample (representativeness)		
Admission	N	%	N		N	%	
2001/2014	340	29%	828	71%	1168	97%	
2014/2015	23	20%	94	80%	117	94%	
Total	363	28%	922	72%	1285	97%	

Table 17: Factors that influenced students' decision to choose the medical degree (1st factor to 4th factor)

		, A	Acaden	nic Yea	r of Ad	mission	n
		2001/	/2014	2014	/2015	То	tal
		N	%*	N	%*	N	%*
To have the married described	1st factor	66	5%	4	3%	70	5%
To have the required classifications	Total	685	57%	64	51%	749	56%
The track match my educational/ professional/vocational	1st factor	981	81%	100	80%	1081	81%
interests	Total	1122	93%	112	90%	1234	93%
Paradia da dida a	1st factor	17	1%	0	0%	17	1%
Family tradition	Total	103	9%	4	3%	107	8%
	1st factor	18	1%	1	1%	19	1%
Friends influence	Total	292	24%	2	2%	294	22%
D	1st factor	25	2%	0	0%	25	2%
Parents and/or relatives influence	Total	666	55%	25	20%	691	52%
Former or actual students information	1st factor	15	1%	1	1%	16	1%
Former of actual students information	Total	453	38%	27	22%	480	36%
Dissatisfaction with the previous/current professional	1st factor	0	0%	0	0%	0	0%
activity	Total	7	1%	0	0%	0	0%
	1st factor	0	0%	0	0%	0	0%
Aspiration for a stable professional future	Total	3	0%	0	0%	0	0%
	1st factor	19	2%	1	1%	20	2%
Other	Total	133	11%	7	6%	140	11%

Total: total of students who check this option as 1st, 2nd, 3rd or 4th factor.

^{*} Students sample differ for each one of the items. Proportions calculated considering the total number of students admitted.

Table 18: Factors that influenced students' decision to choose SHS/UM (1st factor to 4th factor)

Table 18. Pactors that influence					of Admission		
		2001/2		2014/		То	
		N	%*	N	%*	N	%*
Geographical proximity	1st factor	527	44%	52	42%	579	44%
Ocograpinear proximity	Total	953	79%	98	78%	1051	79%
Geographical proximity of	1st factor	24	2%	0	0%	24	2%
relatives	Total	85	7%	1	1%	86	6%
Economic resources owned	1st factor	34	3%	1	1%	35	3%
Economic resources owned	Total	193	16%	14	11%	207	16%
Grade point average in the	1st factor	54	4%	9	7%	63	5%
previous year	Total	239	20%	41	33%	280	21%
Extracurricular academic life	1st factor	28	2%	3	2%	31	2%
Extraculticular academic me	Total	163	14%	14	11%	177	13%
Quality of learning/teaching	1st factor	283	23%	31	25%	314	24%
process	Total	813	67%	93	74%	916	69%
Prestige of the degree	1st factor	100	8%	5	4%	105	8%
Prestige of the degree	Total	612	51%	50	40%	662	50%
I liked the curriculum of the	1st factor	75	6%	2	2%	77	6%
degree	Total	365	30%	29	23%	394	30%
I liked the learning/teaching	1st factor	93	8%	7	6%	100	8%
methods	Total	427	27%	51	41%	478	36%
Friends influence	1st factor	18	1%	0	0%	18	1%
Friends influence	Total	146	12%	6	5%	152	11%
Parents and/or relatives	1st factor	34	3%	3	2%	37	3%
influence	Total	276	23%	18	14%	294	22%
Former or actual students	1st factor	17	1%	2	2%	19	1%
information	Total	179	15%	24	19%	203	15%
Method of selection	1st factor	0	0%	0	0%	0	0%
Method of Selection	Total	0	0%	0	0%	0	0%
Track duration	1st factor	0	0%	0	0%	0	0%
Track duration	Total	3	0%	0	0%	3	0%
Other	1st factor	19	2%	0	0%	19	1%
Ouici	Total	43	4%	1	1%	44	3%

Total: total of students who check this option as 1st, 2nd, 3rd or 4th factor.

Table 19: The student says he is familiar with the SHS/UM medical curriculum (question not included in the survey in 2014/2015)

Table 20: Next academic year: the student intends to stay in the medical degree (question not included in the survey in 2014/2015)

Table 21: Next academic year: the student intends to stay in the same university (question not included in the survey in 2014/2015)

Table 22: Difficulties/problems anticipated by students

^{*} Students sample differ for each one of the items. Proportions calculated considering the total number of registered students.

(question not included in the survey in 2014/2015)

Table 23: Students' educational background on admission

THE TOTAL OF THE TANK OF THE T	Academic Year of Admission								
	2001/2			/2015	Tot	al			
	N	%	N	N	%				
Secondary school	1133	97%	116	99%	1249	97%			
Higher education - bachelor	3	0%	0	0%	3	0%			
Higher education – "licenciatura"	22	2%	1	1%	23	2%			
Postgraduate - Master	4	0%	0	0%	4	0%			
Postgraduate - PhD	5	0%	0	0%	5	0%			
Sample (representativeness)	1167	94%	117	94%	1284	96%			

Table 24: Students' employment status on admission

I intend to ma	intain that	Without	professional	Part-	-time	Full-	-time	San	nple
professional s		ac	WO	rker	WOI	rker	(representativeness)		
professionars	ituation,	N	%	N	%	N	%	N	%
2001/2014	In the first 3 years	764	96%	23	3%	10	1%	797	66%
	In the last 3 years	697	98%	13	2%	5	0%	715	59%
2014/2015	In the first 3 years	89	98%	2	2%	0	0%	91	73%
2014/2015	In the last 3 years	70	97%	2	3%	0	0%	72	58%
Total	In the first 3 years		96%	25	3%	10	1%	888	67%
Total	In the last 3 years	787	98%	15	2%	5	1%	807	61%

Table 25: Student's father educational background

		Acad	emic Yeaı	of Admis	sion	
	2001/2	2014	2014	/2015	Tot	al
	N	%	N	N	%	N
No qualifications	0	0%	0	0	0%	0
1st cycle of basic education	152	13%	12	152	13%	12
2nd cycle of basic education	96	8%	10	96	8%	10
3rd cycle of basic education	175	15%	19	175	15%	19
High school	270	23%	19	270	23%	19
higher education - bachelor	60	5%	4	60	5%	4
higher education – "licenciatura"	319	27%	40	319	27%	40
Postgraduate - Master	61	5%	7	61	5%	7
Postgraduate - PhD	28	2%	4	28	2%	4
Sample (representativeness)	1161	96%	115	1161	96%	115

Table 26: Student's father professional category (question not included in the survey in 2014/2015)

Table 27: Student's mother educational background

			Academic Yea	r of Admission	l	
	2001	/2011	2012	/2013	То	tal
	N	%	N	N	%	N
No qualifications	0	0%	1	0	0%	1
1st cycle of basic	133	11%	3	133	11%	3
education						
2nd cycle of basic	91	8%	11	91	8%	11
education						
3rd cycle of basic	136	12%	21	136	12%	21
education						
High school	214	18%	15	214	18%	15
Higher education -	97	8%	4	97	8%	4
bachelor						
Higher education –	415	36%	47	415	36%	47
"licenciatura"						
Postgraduate - Master	64	5%	12	64	5%	12
Postgraduate - PhD	17	1%	1	17	1%	1
Sample	1167	97%	115	1167	97%	115
(representativeness)						

Table 28: Student's mother professional category (question not included in the survey in 2014/2015)

C. ALTERNATIVE TRACK

C.1. REGISTERED STUDENTS:

Table 29: Admission Process: all registered students

				Aca	demic Yea	ar of Adm	ission				
	2011	/2012	2012/2013		2013/2014		2014	/2015	Sample (representativeness)		
	N	%	N	%	N %		N	%	N	%	
SAP: graduates	20	27%	19	26%	17	30%	18	24%	74	100%	
Transfers: Aveiro	0	0%	0	0%	10	100%	0	0%	10	100%	
Reinstatement	1	100%	0	0%	0	0%	0	0%	1	100%	
Total	21	25%	19	22%	27	41%	18	21%	85	100%	

C.2. REGISTERED STUDENTS: all registered students

Table 30: Information about previous degrees

Academic Year	Num			-	ears of		mber o	-			Note of previous track final				
of Admission		prev	ious d	legree		com	plete th	ne pre	evious	degree		grade			
	N	%	Min	Ma	Mean	N	%	Mi	Ma	Mean	N	%	Min.	Max	Mea
				X.				n.	Χ.						n
2011/2012	20	30 %	4	6	4.4	20	30%	4	6	4.5	20	30%	14	17	15.0
2012/2013	17	25 %	3	6	4.6	17	25%	3	6	4.6	17	25%	14	17	15.1
2013/2014	17	25 %	3	6	4.4	17	25%	3	6	4.6	16	23%	14	18	14.9
2014/2015	15	22 %	2	6	3.9	15	22%	2	6	3.8	16	23%	14	18	15.5
Sample (representativene ss)	69	81 %	2	6	4.3	69	81%	2	6	4.4	69	81%	14	18	15.1

Table 31: My previous degree was my # option

Academic Year of									San	nple
Academic Year of Admission	1st O	ption	2nd C	Option	3rd C	ption	Another	Option	(represent	ativeness)
7 Karrinssion	N	%	N	%	N	% N %		N	%	
2011/2012	8	40%	9	45%	0	0%	3	15%	20	95%
2012/2013	5	29%	7	41%	1	6%	4	24%	17	89%
2013/2014	7	41%	6	35%	1	6%	3	18%	17	100%
2014/2015	8	50%	2	13%	0	0%	6	38%	16	89%
Total	28	40%	24	34%	2	3%	16	23%	70	93%

Table 32: Medical Degree: When admitted to the previous degree, Medicine was my # option

Academic Year of	λ.	I.a.	V			nple ativeness)
Admission	IN	lo	Y	es	(represent	auveness)
7 (4)111551011	N	%	N	%	N	%
2011/2012	12	60%	8	40%	20	95%
2012/2013	8	47%	9	53%	17	89%
2013/2014	10	59%	7	41%	17	100%
2014/2015	8	50%	8	50%	16	89%
Total	38	54%	32	46%	70	93%

Table 33: Students' option for SHS/UM: The SHS/UM was my # option

Academic Year of Admission	1st O	ption	2nd C	Option	3rd C	ption	Another	Option		nple ativeness)
Admission	N	%	N	%	N % N		N	%	N	%
2011/2012	12	63%	0	0%	1	5%	6	32%	19	90%
2012/2013	1	5%	0	0%	0	0%	18	95%	19	100%
2013/2014	11	65%	1	6%	0	0%	5	29%	17	100%
2014/2015	9	56%	0	0%	1	6%	6	38%	16	89%
Total	33	46%	1	1%	2	3%	35	49%	71	95%

Table 34: Present year: The student applied to other medical degrees

Academic Year of Admission	N	lo .	Y	es	Sample (representativeness)			
Admission	N	%	N	%	N	%		
2011/2012	10	50%	10	50%	20	95%		
2012/2013	7	41%	10	59%	17	89%		
2013/2014	12	71%	5	29%	17	100%		
2014/2015	13	81%	3	19%	16	89%		
Total	42	60%	28	40%	70	93%		

Table 35: Factors that influenced students' decision to choose the medical degree (1st factor to 4th factor) (question not included in the survey in 2014/2015)

Table 36: Factors that influenced students' decision to choose SHS/UM (1st factor to 4th factor)

				A	cadem	ic Yea	r of A	dmissio	on		
		2011	/2012	2012	/2013	2013	/2014	2014	/2015	То	tal
		N	%*	N	%*	N	%*	N	%*	N	%*
Geographical proximity	1st factor	4	19%	4	21%	6	35%	3	17%	17	23%
	Total	12	57%	12	63%	9	53%	8	44%	41	55%
Geographical proximity of relatives	1st factor	0	0%	0	0%	0	0%	0	0%	0	0%
	Total	2	10%	1	5%	0	0%	1	6%	4	5%
Economic resources owned	1st factor	0	0%	0	0%	0	0%	0	0%	0	0%
	Total	2	10%	2	11%	1	6%	0	0%	5	7%
Grade point average in the previous year	1st factor	0	0%	4	21%	0	0%	0	0%	4	5%
	Total	0	0%	12	63%	0	0%	0	0%	12	16%
Extracurricular academic life	1st factor	0	0%	2	11%	0	0%	0	0%	2	3%
	Total	0	0%	6	32%	0	0%	0	0%	6	8%
Quality of learning/teaching process	1st factor	5	24%	1	5%	5	29%	6	33%	17	23%
	Total	14	67%	8	42%	13	76%	10	56%	45	60%
Prestige of the degree	1st factor	1	5%	3	16%	2	12%	0	0%	6	8%
	Total	10	48%	10	53%	10	59%	7	39%	37	49%
I liked the curriculum of the degree	1st factor	1	5%	0	0%	2	12%	1	6%	4	5%
	Total	7	33%	0	0%	8	47%	5	28%	20	27%
I liked the learning/teaching methods	1st factor	3	14%	0	0%	3	18%	1	6%	7	9%
	Total	13	62%	1	5%	6	35%	6	33%	26	35%
Friends influence	1st factor	0	0%	0	0%	0	0%	0	0%	0	0%
	Total	2	10%	2	11%	0	0%	0	0%	4	5%
Parents and/or relatives influence	1st factor	0	0%	2	11%	0	0%	0	0%	2	3%
	Total 1st	0	0%	0	26%	0	6% 0%	0	0%	6	8% 0%
Former or actual students information	factor Total	3	14%	3	16%	0	0%	0	0%	6	8%
	1st										
Method of selection	factor Total	6	29% 57%	0 2	0% 11%	0	0% 35%	7	11% 39%	8 27	11% 36%
	1st										
Track duration	factor Total	0	0% 5%	2	11% 21%	1 10	6% 59%	9	11%	5 24	7% 32%
	1st										
Other	factor Total	0	0%	0	0% 0%	0	0%	0	0%	0	0%
Total: total of students who check this		0				0	0%	0	0%	0	0%

Total: total of students who check this option as 1st, 2nd, 3rd or 4th factor.

^{*} Students sample differ for each one of the items. Proportions calculated considering the total number of students admitted (2011/2012: 20; 2012/2013:18).

Table 37: The student says he is familiar with the SHS/UM medical curriculum (question not included in the survey in 2014/2015)

Table 38: Next academic year: the student intends to stay in the medical degree (question not included in the survey in 2014/2015)

Table 39: Next academic year: the student intends to stay in the same university (question not included in the survey in 2014/2015)

Table 40: Students' admission: moving away from the family home (Coming to the SHS/UM meant I had to leave the family home)

Academic Year of	N	lo	Y	es	Sample (representativeness)		
Admission	N	%	N	%	N	%	
2011/2012	13	65%	7	35%	20	95%	
2012/2013	10	56%	8	44%	18	95%	
2013/2014	8	47%	9	53%	17	100%	
2014/2015	10	63%	6	37%	16	89%	
Total	41		30		71	95%	

Table 41: Difficulties/problems anticipated by students (question not included in the survey in 2014/2015)

Table 42: Students' Gender

Academic Year of	Academic Year of Fer		M	ale	Sample (representativeness)		
Admission	N	%	N	%	N	%	
2011/2012	13	62%	8	38%	21	100%	
2012/2013	11	58%	8	42%	19	100%	
2013/2014	8	47%	9	53%	17	100%	
2014/2015	10	56%	8	44%	18	100%	
Total	42	56%	33	44%	75	100%	

Table 43: Students' nationality

		Academic year of Admission									
	2011/2012		2012	2012/2013		2013/2014		2014/2015		Total	
	N	%	N	%	N	%	N	%	N	%	
All other Nationalities	1	5%	0	0%	0	0%	0	0%	1	1%	
Portuguese	20	95%	18	100%	17	100%	16	100%	71	99%	
Sample (representativeness)	21	100%	18	95%	17	100%	16	89%	72	96%	

Table 44: Students' age

Academic year of Admission						
Academic year of Admission	N	%	M	DP	Mín	Máx
2011/2012	21	100%	28,70	4,61	23	37
2012/2013	18	95%	27,82	4,20	22	35
2013/2014	16	94%	27,82	3,14	24	33
2014/2015	16	89%	28,23	4,69	22	36
Sample (representativeness)	71	95%	28,19	4,17	22	37

Table 45: District of origin

Academic year of Admission	Braga		Porto		Outro		Sample (representativeness)	
	N	%	N	%	N	%	N	%
2011/2012	9	43%	4	19%	8	38%	21	100%
2012/2013	6	33%	7	39%	5	28%	18	95%
2013/2014	11	65%	4	24%	2	12%	17	100%
2014/2015	7	44%	3	19%	6	38%	16	89%
Total	33	46%	18	25%	21	29%	72	96%

Table 46: Type of secondary school where the student completed the 12th year: all contingents

Academic year of	Public		Priv	vate	Sample (representativeness)		
Admission	N	%	N	%	N	%	
2011/2012	19	95%	1	5%	20	95%	
2012/2013	15	83%	3	17%	18	95%	
2013/2014	15	88%	2	12%	17	100%	
2014/2015	15	94%	1	6%	16	89%	
Total	64	85%	7	39%	71	95%	

Table 47: Students' educational background on admission

		Academic year of Admission								
	2011/2012		2011/2012		2013/2014		2014/2015		Total	
	N	%	N	%	N	%	N	%	N	%
higher education – "licenciatura"	14	65%	14	78%	10	56%	7	44%	45	63%
Postgraduate - Master	3	15%	4	22%	7	41%	9	56%	23	32%
Postgraduate - PhD	4	20%	0	0%	0	3%	0	0%	4	6%
Sample (representativeness)	21	100%	18	95%	17	100%	16	89%	72	96%

Table 48: Previous Track

Table 48. Hevious Hack			Aca	ademic year	r of Admiss	sion		
	2011	/2012	2012	/2013	2013	/2014	2014	/2015
	N	%	N	%	N	%	N	%
Clinical analysis	1	5%	0	0%	2	13%	0	0%
Pathology Anatomy	0	0%	2	11%	0	0%	0	0%
Pathology, cytology and tanatological Anatomy	1	5%	0	0%	0	0%	0	0%
Physical Education	0	0%	0	0%	1	6%	0	0%
Biology	1	5%	0	0%	2	13%	1	7%
Biomedical Engineering	0	0%	0	0%	1	6%	0	0%
Microbial Biology and genetics	1	5%	0	0%	0	0%	0	0%
Biochemistry	1	5%	1	6%	1	6%	2	13%
Cardio Pulmonology	1	5%	0	0%	1	6%	0	0%
Nursing	5	25%	2	11%	1	6%	5	33%
Biological Engineering	2	10%	0	0%	0	0%	0	0%
Pharmaceutical Sciences / Pharmacy	1	5%	5	28%	2	13%	1	7%
Mathematics	0	0%	0	0%	1	6%	1	7%
Nutrition Sciences	0	0%	1	6%	1	6%	2	13%
Physics and chemistry	1	5%	1	6%	0	0%	0	0%
Physiotherapy	0	0%	2	11%	2	13%	0	0%
Psychology	0	0%	1	6%	0	0%	0	0%
Dental Medicine	1	5%	0	0%	0	0%	0	0%
Integrated Master in Industrial Electronics Engineering	1	5%	1	6%	0	0%	0	0%
Civil Engineering	0	0%	1	6%	0	0%	0	0%
Chemistry	1	5%	0	0%	0	0%	0	0%
Radiology	2	10%	0	0%	0	0%	1	7%
Environmental Health	0	0%	0	0%	0	0%	1	7%
Veterinary Medicine	0	0%	1	6%	1	6%	1	7%
Sample (representativeness)	20	100%	18	95%	16	94%	15	83%

Table 49: Students' employment status on admission

Academic year of Admission	without occupation		part-time worker		full-time worker		Sample (representativeness)	
,	N	%	N	%	N	%	N	%
2011/2012	6	38%	4	24%	6	38%	16	76%
2012/2013	8	50%	6	38%	2	12%	16	84%
2013/2014	8	57%	4	29%	2	14%	14	82%
2014/2015	9	56%	3	19%	4	25%	16	89%

E ALTERNA	ATIVE T	RACK: A	RETROSP	PECTIVE A	ANALYSIS

THE ALTERNATIVE TRACK: A RETROSPECTIVE ANALYSIS

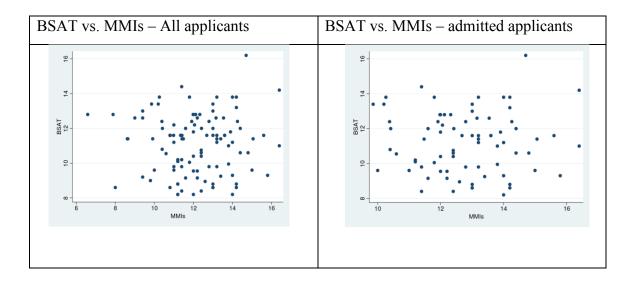
The first cohort of graduates, who started the alternative track of the undergraduate medical program of Minho, has graduated in the academic year 2014/2015. Minho's Longitudinal Research Database was used to obtain empirical evidence about the validity of the selection process, the performance of students of the alternative track, and how that performance compares to that of student in the 6 year program. For that purpose, we compared the performances of students from the two tracks.

Minho's admissions process: description and concurrent validity

Minho's admissions process to the alternative track design, evolved throughout the years. There are three selection tools that have always been considered: (i). students knowledge on the basic sciences – applicants take a locally designed Basic Sciences Admission Test (BSAT), with 100 MCQ items, designed to test essential concepts in biology, chemistry, physics and mathematics; to enter how much students (ii) observable personal qualities and skills – the best 27-30 students in terms of BSAT performance take a locally designed Multiple Mini Interview type of examination with 10 scenarios; (iii) personal history – the curriculum vitae is scrutinized in terms of past academic performance, professional history and evidence of in voluntary participation in institutional initiatives (introduced in 2013/14). The table below presents the evolution of the admission process.

	Until 2011/2012	2011/2012	2012/2013	2013/2014	2014/2015
Number of years in the program	6	4	4	4	4
	BSAT	BSAT	BSAT	BSAT	BSAT
Admission Steps	CV analysis	MMIs	MMIs	CV analysis	CV analysis
				MMIs	MMIs
Number of applicants	-	221	237	109	110
Number of candidates admitted to the MMIs	-	29	30	28	29

Concurrent validity is demonstrated when correlates between two measures are significant The figure below plots the applicant performances in the BSAT and in the MMIs between 2011/2012 and 2014/2015 (n=108). There is no significant correlation between the two performances (correlation coefficients presented below). Therefore, there is no concurrent validity between the two measures, thus they are measuring two dimensions of the applicants abilities.



The pearson's correlation coefficient of the correlation between these two variables is 0.0152 and the p-value is 0.88, which means that the coefficient is not statistically different from zero. Interestingly, restricting the analysis to the pool admitted applicants, results in an even higher dispersion, as it is shown in the figure below. For the admitted students, the correlation coefficient is (-0.006) and the p-value is 0.99. This way, it is understandable that the two admission steps assess different competences.

The table below describes these relationships, by academic year. Observing the high p-values it is quite clear that none of the correlation coefficient is statistically different from zero.

	All appli	cants		Admitted applicants			
	N	Correlation	P-value	N	Correlation	P-value	
2011/2012	29	0.0167	0.9316	18	-0.3105	0.2098	
2012/2013	30	0.1487	0.4329	18	-0.0630	0.8040	
2013/2014	28	0.0852	0.6663	18	-0.0178	0.9441	
2014/2015	29	0.2570	0.1783	18	-0.1082	0.6692	

Minho's admissions process: predictive validity

Predictive validity is the extent to which a score on a scale or test predicts scores on some criterion measure. One way of determining the predictive validity of a score in any admissions process is the determination of correlations with student performances in medical school exams. The relationship between the two admission and the performance in the initial curricular units were determined. In the first year of their program, alternative track students attend three CUs: 1) Introduction to Clinical Medicine (jointly with the original track students), 2) Community Health and Human and Social Sciences, and finally 3) Foundations of Medicine. Globally the results suggest that there is predictive validity of the BSAT over performance in science exams in medical school.

The correlations' matrix of the two admission proofs and the three classifications in ICM is presented below.

Correlation Matrix of Evaluations - ICM

	BSAT	MMIs	Written tests (ICM)	OSCE exam	Profession alism
BSAT	1; N=54				
MMIs	0.0515; N=54 (0.7118)	1; N=54			
Written	0.3371; N=35	0.3331; N=35			
tests	(0.0477)	(0.0506)	1; N=35		
OSCE	-0.0498; N=36	0.1384; N=36	0.1862; N=31	1; N=36	
exam	(0.7729)	(0.4207)	(0.3160)		
Profession	0.1300; N=42	0.3022 N=42	0.1561; N=35	-0.0642; N=36	1; N=42
alism	(0.4119)	(0.0517)	(0.3705)	(0.7098)	

p-values in parenthesis. N – number of observations

As it is observable in the table, for a 5% level of significance, the only coefficient that is statistically different from zero is the one that measures the correlation between the BSAT and the written test scores. The p-value of the correlation between the written test and the MMIs is very close to 5%. The coefficient between the written test and the BSAT score is 0.3371, which means that the BSAT score explains 11.4% of the variability of the written tests scores.

Interestingly, the MMIs performance correlates with the professionalism scores to a level that is nearly significant. This is very interesting, as the professionalism scores result from assessors who are medical tutors in health institutions. It is interesting that the admissions tool can actually provide an indication of the professionalism of students at workplaces.

Correlation Matrix of Evaluations - MF

	BSAT	MMIs	Written tests (MF)	FSSE
BSAT	1; N=54			
MMIs	0.0515; N=54 (0.7118)	1; N=54		
Written tests (MF)	0.4720; N=39 (0.0024)	0.2520; N=39 (0.1217)	1; N=39	
FSSE	-0.0266; N=40 (0.8707)	0.2122; N=40 (0.1886)	0.0921; N=33 (0.6103)	1; N=40

p-values in parenthesis. N – number of observations

The written test scores are moderately correlated with the BSAT score. The first explains 22.2% of the variability of the second. The significant correlation can be considered evidence that the basic sciences knowledge of students, as assessed the admission BSAT, is associated with the knowledge demonstrated related to the scientific foundations of medicine. Thus, the BSAT is a useful admission tool, valid for this purpose.

Correlation Matrix of Evaluations – CH-HSS

	BSAT	MMIs	Final Score
BSAT	1; N=54		
MMIs	0.0515; N=54 (0.7118)	1; N=54	
Final Score	0.1450; N=54 (0.2955)	-0.0721; N=54 (0.6046)	1; N=39

p-values in parenthesis. N – number of observations

Finally, regarding CH-HSS, it is clear that the correlation between the two admission steps and the final score in this CU is not statistically different from zero. Taken together will the previous data, this result is interesting since the two tests measure different areas of knowledge: basic sciences (BSAT) and social sciences (CH-HSS). Therefore, in this case, absence of significant correlations can be taken as an indicator of validity of the BSAT, in showing that the content and not the format of the BSAT, predicts performance on basic sciences in medical school.

Minho's students performances compared: Alternative vs. Original track

The proposal of an alternative track in Minho's Medical degree had the underlying assumption that it would be possible to train students from the two programs to reach identical levels of performance. We therefore analysed comparatively the performance of students of both tracks. The results are presented in the table below, suggest that the performance are comparable.

		Alternati	ve Tracl	ζ	Original	Track		T-test
	Curricular Unit	Mean	SD	N	Mean	SD	N	equal means (p- value)
3	IMD	13.54	1.57	42	13.84	1.55	332	0.2415
	CNC	14.50	1.09	26	14.47	1.17	222	0.8903
	FCMB1	16.24	1.09	33	16.17	1.07	228	0.7174
	HCR1	16.91	0.93	31	16.44	1.29	239	0.0510
4	MR1	13.98	1.11	26	13.84	1.49	221	0.6417
	MCHR	14.37	1.48	30	14.38	1.32	221	0.9928
	OP3	17.55	1.23	31	17.54	1.22	215	0.9858
	VD4	17.67	0.80	21	17.59	0.82	123	0.7044
	FCMB2	16.17	0.83	8	15.82	1.15	109	0.3900
	HCR2	12.25	1.88	10	13.06	1.40	104	0.0906
5	MR2	14.49	1.02	10	14.64	1.26	116	0.7094
	OR	17.78	1.08	10	17.66	1.39	114	0.8027
	SR	14.63	1.03	10	14.81	1.13	114	0.6373
	VD5	17.91	0.83	11	17.74	0.60	111	0.3875

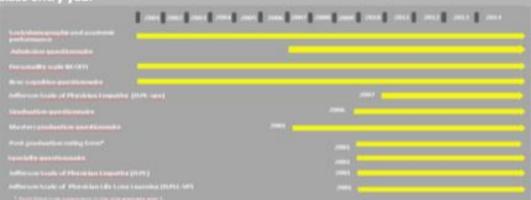
The performance of the alternative track students is identical to that of their original track counterparts. For a 5% significance level, the null hypothesis of equality of means is not rejected for a single CU. However, we can also observe that the alternative track students reach higher mean scores for 10 out of the 14 CUs.

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ELECSUM Last Page: The Longitudinal Study of the School of Health Sciences

Medical Education Unit, School of Health Sciences, University of Minho Principal Investigator: Manuel João Costa

Available data by class entry year



ELECSUM data

(per participant)

Before medical school

- · Demographics
- · Admission GPA

During medical school

- * Admission guestionnaire
- * Socio-demographic questionnaire
- * Non-cognitive questionnaire
- * ISPE-SHY
- NEOFFI questionnaire
- Course grades
- · GPA
- Course grades
- GPA
- Course grades
- + GPA
- · Graduation questionnaire
- · JSPE-spv
- *Course grades
- + GPA
- * JSPE-spv
- · Course Grade
- · GPA
- · Course grades
- · Masters graduation questionnaire
- * ISPE-sov

After medical school

- . Specialty:
 - -Institution
 - -Geographic location
- · Proficiency rating scale
- · Residency:
 - -institution
 - -Geographic location
- Non-cognitive questionnaire
- * JSPLL-VP
- + ISPE

Reason for initiating the study: The Longitudinal Study of School of Heath Sciences (ECS) of University of Minho (ELECSUM) was initiated in 2001, based on the premise that medical schools accountability, is a right/duty of Institutions that graduate healthcare professionals.

History: ELECSUM was implemented with the purpose of tracking every medical students of ECS throughout their academic life and entire professional careers.

ELECSUM data of each participant are constantly updated from publicly available information and from other information gathered by direct contact with the students of ECS since beginning of the school (2001). ELECSUM allowed the design of one of the most complete and extensive database of medical education in Portugal.

Goals

T COL

Year

Year

4

Year

6

Year

Post graduate Year 1

Service to:

- Faculty (e.g., answering to inquiries)
- Academic and Scientific committees (e.g., providing data to analyze admissions trends, to evaluate programs, or to examine success/failure factors in students' performance)
- Administration of school (e.g., providing data for the annual report, or accreditation)
- · Students (e.g., guiding academic and career development)

· Address medical education related questions for publication and presentation at professional meetings

ELECSUM in Numbers

(Last update: July, 2015)

- · Contained approximately 61313 observations
- Tracked 1287 students of which 502 graduates
- Corresponding to 960 variables
- Garnered data from 89 postgraduate training hospitals
- · Inspired 15 peer-reviewed publications in international journals and conference proceedings

Adaptation of Instruments

The ELECSUM has adapted the following instruments for measuring educational outcomes:

- Jefferson Scale of Physician Empathy student version (JSPE-spv)
- Jefferson Scale of Physician Empathy physician version (JSPE)
- · Non-cognitive scale
- NEOFFI 60 item
- Jefferson Scale of Physician Lifelong Learning (JSPLL-VP)

Ana Salgueira, Ana Lemos, Patrício Costa (School of Health Research Scholarships: Carl

Miguel Portela (School of Economics and Management)

2007-2011: Fundação para a Ciência e Tecnologia,