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The ESID Newsletter is made for the members of ESID - the European Society for Immuno Deficiencies.

It is published under the responsibility of the ESID Board, and at this moment it is edited by Esther de Vries.

Any ESID member who is interested in publishing his or her views, research, new ideas or other material in the ESID Newsletter is cordially invited to submit copy to the Editor. Suitability for publication is assessed by the Editor in consultation with the other members of the ESID Board

#### Editor's address:

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# PLEASE NOTE !!! email has changed into: dr.estherdevries @tiscali.nl

Front page:
Beautiful winter sun in the French Alps.

#### Dear ESID members,

In this issue of the ESID Newsletter you will find another 'focus on a country', Sweden this time, and a 'PID-care in development' about Iran. I hope you will enjoy reading these!

Also, you will find important information about the new ESID Educational Working Party scholarship on page 22, and about the upcoming ESID Summer School on pages 23 & 24. Please react if you are interested, and inform others about these possibilities.

I still need to find some missing addresses, please look if you know anyone listed on page 4, and send their address details to me (or ask them to do that themselves).

You'll find lots of information about past and future meetings — including the ESID meeting in Budapest in 2006 — in the 'News & Views' section. Do feel free to send your own news and views to me for future issues!!

Several interesting Working Party reports are included as well.

I hope you find a lot of things that are useful or interesting for you.

If you do (and if you don't as well !!): please send me some of copy your own making for the next issue of our ESID Newsletter!!

Best wishes to all of you,

Esther DE VRIES, Editor



ESID is the European Society for Immunodeficiencies. It was formed in 1994. The forerunner of ESID, the informal European Group for Immunodeficiencies (EGID) was established in 1983. Anyone who is interested in primary immunodeficiency diseases can become a member of ESID. You can find the necessary information to contact the treasurer Esther de Vries at www.esid.org.

Within ESID, six Working Parties are actively engaged in coordinating the member's joined efforts in patient care and research in primary immunodeficiency diseases: Bone marrow transplantation (chair: Mario Abinun), Patient registries (chair: Bodo Grimbacher), Clinical (chair: Bobby Gaspar), Genetics (chair: Anna Villa), Education (chair: Anders Fasth), and ESID juniors (chair: Pim van der Vossen). Anyone who is interested in participating in one or more of these Working Parties is invited to do so. Please contact the chairman of the relevant Working Party (contact information available at www . esid . org).

In 1994, a main registry of various forms patients with immunodeficiency in Europe was established. Altogether, data from some 10,000 patients from 26 countries were received until now. 1995, the first locus-specific immunodeficiency mutation database through accessible the internet was (BTKbase X-linked established for agammaglobulinemia - curators Mauno Vihinen and C.I. Edvard Smith). Since then, several additional locus-specific data bases have been established: ADAbase (adenosine deaminase deficiency - curators Mauno

Vihinen and Michael Hershfield), BLMbase (Blooms syndrome - curator Mauno Vihinen), CYBAbase ( autosomal recessive p22 phox deficiency - curators Dirk Roos and Mauno Vihinen), CYBBbase (X-linked chronic granulomatous disease (XCGD) - curators Dirk Mauno Roos and Vihinen), CD3Ebase (autosomal recessive CD3 epsilondeficiency curators Mauno Vihinen and Jose R. Requeiro), CD3Gbase (autosomal recessive CD3 gamma deficiency - curators Mauno Vihinen and Jose R. Regueiro), CD40Lbase (X-linked hyper-IgM syndrome - curators Luigi D. Notarangelo and JAK3base Vihinen). (autosomal recessive severe combined JAK3 deficiency curators Luigi D. Notarangelo and Mauno Vihinen), NCF1base (autosomal recessive p47 phox deficiency - curators Dirk Roos and Vihinen), NCF2base (autosomal Mauno recessive p67 phox deficiency - curators Dirk and Mauno Vihinen), RAG1base (autosomal recessive severe combined RAG1 deficiency - curators Mauno Vihinen and Anna Villa), RAG2base (autosomal recessive severe combined RAG2 deficiency - curators Mauno Vihinen and Anna Villa), SH2D1Abase (X-linked lymphoproliferative syndrome (XLP) - curators Luigi D. Notarangelo and Mauno Vihinen), (autosomal TCIRG1base recessive osteopetrosis (arOP) - curators Mauno Vihinen and Anna Villa), ZAP70base (autosomal recessive severe combined ZAP70 deficiency curator Mauno Vihinen), WASPbase (Wiskott-Aldrich syndrome - curators Mauno Vihinen and Luigi D. Notarangelo) (information is available at www . esid . org).

ESID organizes a biennial congress to facilitate international contact between primary immunodeficiency specialists. The last congress was organised in 2004 in Versailles, France; the next congress will be organized in Budapest, Hungary in October 2006, and the one after that will be in The Netherlands, in 2008.

= ESID Information =

## President's letter

Dear colleagues,

I would like to draw your attention to two aspects that are vital to our Society.

As announced at the ESID Meeting in Versailles, our Society is now going to support international exchanges for research projects. Anders Fasth in this Newsletter is providing information.

I believe that this is very important to the life of ESID for several reasons. First, this is a unique opportunity for young fellows to participate in solid research projects that will hopefully contribute to their C.V., and to scientific progress in the field of primary immunodeficiencies as a whole. In addition, this international fellowship program will serve to consolidate collaboration across Europe. There is no doubt that international collaboration has represented one of the key factors to European leadership in the field. Finally, through this program, we will offer visibility to young investigators. Indeed, I expect them to be among the lecturers at the next ESID Meetings!

It would be very important that many applications be submitted. It is also essential that all the major centers in Europe collaborate, by promoting research projects to be developed and pursued by young investigators.

The second topic I would like to touch on is the newly developed ESID Registry. While several patients have been entered in the Registry, the numbers must increase rapidly, and I would like to take this opportunity to reinforce all centers to contribute to the Registry. This is in fact one of the most significant challenges at our hands. It is up to us to make this an international success! Very soon, we will know which are the centers that, by contributing the largest numbers of patients to the Registry, will receive an award. The general wish is to see this competition to happen at the highest possible number of patients.

Eastern European Countries are already very active, but it is also essential that we all make our part!

Luigi NOTARANGELO

#### Treasurer's report

Fortunately, many members have reacted to my last reminder for the ESID membership fee! Unfortunately, many members did not ...

If you hear anyone complain that you did receive this ESID Newsletter whereas they did *not*, you can inform them that this is probably caused by their failure to pay their ESID membership fee!

#### CALL FOR HELP

I still need several addresses that are no longer correct in the database!!

Please help us to find the following people:

Antonio NIETO DIAZ, Spain
Sigune SCHMIDT, Germany
Reinhold E. SCHMIDT, Germany
Cristina PANISI, Italy
Magda CARNEIRO-SAMPAIO, Brazil
Catharina SCHÜTZ, Germany
Maria DOS SANTOS GUEDES, Brazil
Joachim FREIHORST, Germany
Mark GOMPELS, UK
Stephan STROBEL, UK
Eva DATKOVA, Slovac Republic
Waleed AL-HERZ
Isabelle PELLIER, France
Sophie DUPUIS, France
Eric OKSENHENDLER, France

If you know them, send me their address details (dr.estherdevries @tiscali.nl), or alert them to send those details to me!! Thanks, for your cooperation!

#### CALL FOR HELP

## News & Views

The 2nd Autumn - Winter School of Clinical Immunology : Progress in Education in Clinical Immunology, December 16 - 18, 2004, Zakopane, Poland

The second Autumn - Winter School of Clinical Immunology was organized in Zakopane. Zakopane is a beautiful small town, at the foot of the highest Polish mountains - Tatra. Fifty-two participants were attending this meeting. A group of young immunologists from both Central-Eastern and from Western-European countries attended this meeting, among them a group of young Polish immunoglogists were represented together with physicians specializing in clinical immunology. This group has been growing and now is composed of 26 clinical physicians.

The topics of the meeting ranged from the current status of primary immuno deficiency diseases in individual countries, including national registries, to the newly created ESID Online Registry. Advances in molecular diagnosis of primary immuno deficiencies and therapy including long term follow-up of patients who had received a bone marrow transplantation were presented. advances in diagnosis classification of CVID and a wide spectrum of CVID cases have been presented. The diagnostic and therapeutic guidelines of some immunodeficiencies primary were discussed.

Invited speakers this year were Teresa Español, Mirjam van der Brug, Barbara Frisch and Anna Berglöf.

The second Autumn - Winter School of Clinical Immunology brought the J- Project to an end. A chain of successive meetings organized in Central-Eastern European countries offered close cooperation between countries and increased our attitude to collaborate in the future.

The conference was located opposite a well-prepared ski area. During the lunch

break some speakers and young colleagues went skiing, others visited the colourful, crowded village.

The 2nd Autumn - Winter School of Clinical Immunology was sponsored by two EU grants; EURO-PID-NAS QLGI-CT-2001-01395, PERFECT QLG1-CT-2002-90358, as well as by Octapharma. The next meeting will be held in Gdansk at the Baltic coast, September 23 - 24, 2005. For more information please contact us at immuno@czd.waw.pl !!

#### Ewa BERNATOWSKA

Comments by Teresa Español:

The meeting "Progress in Education in Clinical Immunology" held in Zakopane ( Poland ) has been an excellent opportunity for young doctors from Poland and some from other Eastern European countries, to learn about Primary Immunodeficiencies. Fisrt of all, it was the presentation of the the European Projects to help to develop diagnostic and reasearch abilities in Poland (Euro-PID and Perfect, A. Berglof, Stockholm and A. Bernatowska, Warsaw) and the new Online European Registry (B. Frisch, Freiburg), so necessary to increase our knowledge on the numbers and situation of PID in Europe.

In the second part of the morning there were two lectures on frequent PID's: and SCID. Common variable Immunodeficiencies are a group of antibody deficiencies, with not yet molecular defect/ defects described. Early diagnosis essential for substitution therapy to be initiated before sequelae develop (mainly bronchiectasis and infammatory disease). T. Espanol (Barcelona) presented the difficulties in diagnosis of cases with familial incidence and autoimmune phenomena as first clinical manifestations, and cases with lymphoid infiltration in intestinal tissues

and brain, as examples of severe forms of CVID. Detection of memory B-cells (CD27+IgD-) is helping to classify these patients in more homogeneous groups, facilitating the prediction of the prognosis and further genetic analysis.

M. van der Brug (Rotterdam) gave an excellent review of SCID due to V(D)J recombination defects (RAG and Artemis cases) and showed that we do not know yet all the possible defects causing SCID. The molecular and genetic analysis of these defects are not only useful diagnostic tools for the patients and genetic counselling for the families, but they are also improving our knowledge about the pathogenic mechanisms underlying the clinical manifestations. During the next day, M. van der Brug also described diagnostic strategies for B-cell deficiencies with known genetic defect.

Very interesting and educative presentations were done on HIGM, SCID and diGeorge syndrome by E. Heropoilitanska, B. Wolska and M. Pac , from the Warsaw group. The methodology used and the very good follow-up are good examples of how PID can be diagnosed if a team of pediatricians and immunologists work together.

The whole meeting was very interactive with a lot of interesting discussions.

The Hotel where the meeting took place was very comfortable and the large coffee-room facilitated the interactions between all participants. A visit to the market with its Christmas atmosphere, completed this rewarding meeting.

Teresa ESPANOL

Meeting announcements:

Why sort cells - FACS and FICTION
 Date: Friday, June 24, 2005
 Venue: Birkbeck College, London
 The Deadline for early registration is May 10th, 2005.

 Targeted Technologies to Dissect Signal Transduction Pathways Date: Friday, 4 th March

Venue: Birkbeck College, London

The Deadline for early registration is February 10th, 2005.

 Advances in Endothelial Cell Isolation and Culture

Date: Friday, March 11, 2005 Venue: Birkbeck College , London

The Deadline for early registration is February 10th, 2005.

■ The 6th UK Cord Blood Immunology Group Meeting

Date: Friday, September 9th, 2005

Venue: The Centre for Life, Newcastle, UK The Deadline for early registration is July 20th, 2005.

The early registration fees are £80 (£70 for IBMS members; £40 for students). After the early registration deadline the fees are £160 (£80 for students).

Real Time PCR

Date: Friday, July 15, 2005 Venue: Birkbeck College, London

The Deadline for early registration is May 20th, 2005.

The early registration fee is £85 (£70 for IBMS members; £45 for students). After the early registration deadline the fee is £170 (£85 for students).

For General enquiries send an email to enquiries@euroscicon.com . To Register go to http://www.euroscicon.com

Inga BIMBIRYTE

LAGID Meeting 2005

LAGID, The Latin American Group for Immunodeficiency, will hold its next yearly meeting in San Miguel de Allende. Guanajuato, Mexico, from November 5 - 9, 2005. Invited speakers are among others: Bodo Grimbacher, Freiburg, Jean Laurent Casanova, Paris and Anders Fasth, Göteborg. For further information contact Francisco Espinosa, e-mail espinosa\_francisco@yahoo.com.mx!

#### The extended J-Project

The J-Project-2004 (see previous ESID Newsletters) was supported by EU but our grant support ended in December 2004. However, from other sources (ECE IPI Centre, Biotest) and local support we continue to organize this important awareness meeting series in East-Central-Europe. This activity should end up in a significantly higher level of PID patient care and research in this Euroregion. I am sure we shall see this during the ESID 2006 Meeting in Budapest.

The continuation of the project is called the Extended J-project. We would like to organize awareness meetings in Bulgaria, Russia, Belorussa, Slovakia, Moldavia, Albania, Croatia, Bosnia-Herzegovina, etc. The first-coming meeting will take place in Sofia, and Elissaveta Naumova set up a great preliminary program (see below). Please join us on April 15-16 in Sofia for a great Extended J-meeting. Traditionally, everyone is traveling on his/her own budget, but there are no local expenses.

#### László MARODI

Recent advances in the diagnosis and therapy of PID, April 15-16, 2005, Medical University, Sofia, 1 Georgi Sofiiski Str.

Dear colleagues,

We kindly invite you to participate at Immunodeficiency (PID) the Primary Awareness Meeting in Sofia, Bulgaria, on April 15-16. This meeting is the continuation of the "J-Project" initiative aimed at dissemination of knowledge on PID in East-Central Europe and to set up a PID Registry in the region. The program was put together as a combined effort of the East-Central Infectiology European and Pediatric Immunology Centre for Training

Research (ECE IPI CTR) and the European Primary Immunodeficiency Program for Newly Associated States (EURO PID NAS).

The meeting will take place at the Medical University of Sofia, in the hall of the University Hospital "St. Ekatherina". The meeting will concentrate on "Recent advances in diagnosis and therapy of PID". The state of national registries, the establishment of a network for molecular genetic diagnosis of PID as well as difficulties to manage severe PID cases will be discussed.

We would appreciate very much your interest and participation at this meeting. Please send the title of your presentation before the 10th of March 2005 to the Organizing Committee by using the following email address: immun@medun.acad.bg.

The organisers will assure free registration, one night accommodation, and meals for all participants due to generous support by our sponsors: ECE IPI CTR, The Jeffrey Modell Foundation, Biotest Pharma GmbH, Baxter.

Overview of the program : Welcome J-Project, Extended Immuno deficency Diseases in Bulgaria, Diagnostic algoritm for immunodeficiency diseases in the Central Laboratory for Clinical Immuno logy, University Hospital "Alexandrovska", Sofia, National Registries, Visit to the Central Laboratory of Clinical University Hospital Immunology, "Alexandrovska", Sofia, Wiskott-Aldrich Symdrom - case report, Molecular genetic analysis of three Hungarian families with WAS, PID-case reports, Molecular genetic analysis in two patients with BLS, Clinical and immunological characteristics of hyper-IgE syndrome in three Hungarian families, CVID case report, East-Central-European Network for molecular genetics diagnosis of PID.

See you soon in Sofia!

Elissaveta NAUMOVA

# XIIth Meeting of ESID IXth Meeting of IPOPI VIIth Meeting of INGID

Hilton Budapest Congress Centre, Budapest, Hungary 5—8 October, 2006

#### MAIN TOPICS:

- Deficiency of monocytes and dendritic
- T- and B-cell deficiencies
- Cytokine therapy
- Gene therapy

Dear Colleague,

It is a pleasure to invite you to the forthcoming meeting of the ESID, the IPOPI, and the INGID that will be held in Budapest, from October 5 to 8, 2006. These prestigious meetings have mostly been organised in West-European countries before. We are therefore pleased and honoured to

host the primary immunodeficiency community in Hungary. To meet the challenge we have recently launched an East-European physician education program also referred to as The J Project. The aim of the Project is to increase professional and social awareness of primary immunodeficiency diseases in 10 East-European countries with a population exceeding 150 million. The joint ESID/ IPOPI/INGID meeting will be held in Budapest, one of the most beautiful and attractive cities in the world. A unique flavour of our capital is the mixture of Western and Eastern cultural traditions.

We are looking forward to seeing you in Budapest in 2006!

László MARODI Congress President Working Party reports

#### BMT Working Party

A short introduction of myself (Mario Abinun) as the new chairman:

I graduated from Medical School in Sarajevo in 1976, and trained in Paediatrics in Belgrade (Board exam 1983). Ratibor Micic, Professor of rheumatology at the Medical Military Academy, and Mirko Mikuska, a real pioneer in paediatric immunology/rheumatology (both in Belgrade), introduced me to the field of PID's in the late '70s. I enjoyed a visiting fellowship in Great Ormond Street Hospital in 1986 - 'BMT for SCID' experience!

My first EGID meeting was in Kerkrade in 1986 - haven't missed one since! I served as Yugoslav representative to EGID till 1992.

I became head of the Department of Paediatric Clinical Immunology at the Mother and Child Health Institute, and Assistant Professor in Paediatrics at the Medical School, University of Belgrade – in 1990. With help from Desa Lilic (than and still my wife) with the 'laboratory part of the problem', we performed the first T-cell depleted BMT for SCID in Yugoslavia in 1990 (he is 15 now and with good T and B cell function last year!).

I enjoyed my first BMT WP meeting in Schloss Elmau in 1991.

I joined Andrew Cant in the new SCID BMT Unit in December 1992, and evolved with the Newcastle Unit. I became a 'regular' on BMT WP meetings. I started BMT for juvenile arthritis in the UK in 2000.

I am keeping links with my colleagues in Belgrade (Srdjan Pasic).

Report of the BMT Working Party meeting organised by Wilhelm Friedrich in Schloss Reisenburg, Ulm, Germany, 12-14 November 2004:

## Metabolic diseases (summarised by Nico Wulffraat on the next day's session):

The meeting Friday afternoon/evening was very lively with lots of discussion mainly on issues of conditioning and enzyme replacement therapy pre-BMT.

Donor hierarchy:

- fully matched id sib (but the ? re: carrier status was raised)
- 10/10 or 9/10 MUD regardless of CMV status
- Cord with >5 (3) x10e7/kg TNC, even better if 10x10e7/kg
- 8/10 MUD or haplo Conditioning:
- HLA id sib Bu 20, Cy 240
- Cord Bu 20, Cy 200, ATG 2.5 mg/ kgx3 days (? Re: steroids here - not resolved)
- MUD as for id sib but give ATG and replete HSCT (no T cell depletion)
- Mismatched MUD or haplo CD34+ fraction with max T cells at 5x10e4/kg and the protocol is Bu, Mel, Flu and ATG

## Osteogenesis imperfecta (update from Ed Horowitz)

- 9 children transplanted; 2 died due to trauma (non-BMT related)
- Growth spurt post BMT followed by mesenchymal stem cell (MSC) transplant (from the same donor, cultured ex vivo, infused w/o conditioning) - not seen in all children and ? effect on walking long-term
- Role of bisphosphonites in reducing the fracture rate and pain, and increasing the 'well' feeling but not effective in improved prognosis overall and? re: inducing osteopetrosis and brittle bones
- Gene marking in stem cells, T cells and MC - study for 2005

## <u>Juvenile idiopathic arthritis (Nico Wulf-fraat)</u>

Current European data - De Kleer et al. Ann Rheum Dis 2004;63:138.

- Alternative conditioning regimen: CyA d-14 to d+7; Pred 2 mg/kg/day d-14 to d+11, than taper slowly; Cy 60 mg/kg/ day x2 d-9, -8; ATG 2.5 mg/kg/day x4 d-7 to d-4; Fludarabine 30 mg/me2/ day x5 d-5 to d-1.
- Discussion re: macrophage activation syndrome, and the role of and relevance of measurement of Tregs CD4/25+ve expressing FOXP3 pre and post AHSCT

#### Primary Immunodeficiencies

SCETIDE 2000-2004 and related issues - Andrew Cant presented data on behalf of Paul Landais re 603 CSID and 669 non-SCID. Better every year, except B- SCID. Earlier dg, better at BMT procedure, better at dealing with viral infections, overall more experience. Database closed December 2004 Need for evaluation: CID by age; teenage group; phenotypic id donors.

Engraftment studies - chimaerism (when, how, which cells...) Chimaerism WP: Wilhelm, Alain, Andy, Gigi, Colin, Bobby, Marina, Ed Horwitz and Sophie DLI and/or boost to improve chimaerism: Arjan, Andy.

Immune reconstitution studies – need for a good European study. Susana Müller presented data on 42 SCID and chimaerism post-BMT; Bu8 not enough for B- SCID; Bu16 gives full/mixed chim in B+SCID.

Long term f/u SCID - Alain Fischer presented Paris data on haplo-BMT for B+SCID - w/o myeloablation no good T cell function (TRECs). Do all SCID's need some conditioning? Need for a good European study... TRECs and surrogate markers (CD31, CD27 on CD45RA+ve cells) B-SCID - RAG vs Artemis.

Update on gene therapy programme Alain - XL SCID: modification of numbers of transduced CD34+ to 3-10×10e6 cells/kg; trial reopened Marina - RAG SCID: changed to a lentiviral vector; need conditioning.

Reduced intensity protocol (RIC) - Rao et al. Blood on line publ Sept 2004 - GOS experience. Christina Peters/Vienna presented their data on 22 pts. Conditioning: Fludarabine 30 mg/me2/day x6 d-8 to d-3; Melphalan 140 mg/me2 d-2; TLI 2G d0; Campath 1H 0.2 mg/kg x5 d-5 to d-1 or ATG 2.5 mg/kg x3 d-3 to d-1; CyA 3 mg/kg/day starting d-1; MMF 30 mg/kg/day i.v. d+1 to d+28; Complications - liver (not many VOD), mucositis, if TCD rejection (in 3), bact/viral/fungal infections.

IPEX - Several cases reported (Vienna-1, Milan-2, Brescia-5, Newcastle-2, GOS-1). ? conditioning regimen; ? monitoring post-BMT; ? checking CyA responsiveness pre-BMT. Need for some consensus based on experience.

ADA SCID - Alessandro Aiuti, Gigi Notarangelo, Bobby Gaspar presented data on gene, PEG and BMT treatment results. Gene therapy option should be incorporated in the current Guidelines.

WAS - Hulya Oszahin reported the European data (publication in preparation). Problems: chimaerism and autoimmunity post-BMT. David Nelson's MoAb that recognises WASP in Ly, Mo, PLT is available (dln@helix.nih.gov).

HLH - Marie Ouachee presented data on 68 treated patients (watch out for this publication!). Of 22 w chemotherapy, 15 went to BMT, and 7 are alive; all the 7 not transplanted died. Of 46 w immunotherapy: 36 had ATG (10 mg/kg/d), steroids and CsA - 26 went to BMT and 17 are alive; all the 10 not transplanted died. 10 had CsA and steroids - 7 went to BMT and 4 are alive; of 3 not transplanted 2 are alive. Lots of infections post-ATG. VOD and infections post-BMT. 12 went for 2nd BMT.

CGD - Tayfun Gungor and Terry Flood presented data, and Reinhard Seger has since emailed the updated protocol for adults and children. Frankfurt group presented data on gene therapy; need for Bu4 mg/kg x2 for engraftment of transduced cells.

#### Mario ABINUN

#### Genetics Working Party

In collaboration with the Inborn Errors Group, we have started a study trying to link the genotype of infantile malignant osteopetrosis patients and the outcome after SCT. Our group has been involved for a long time in the genetic analysis of OP cases due to different genes (Atp6i, Clcn7 and Gl), and as already mentioned in a previous Newsletter issue, we have some evidence that patients bearing Clcn7 mutations have a progressive neurological disease leading to death even after transplantation.. We would like to confirm this observation by collecting a wide number of patients. For this purpose, we need the help of transplant units to gather several patients treated by SCT. In order to accomplish our aim, we asked Marina Cavazzana Calvo and Colin Steward to propose a collaborative study joining the activity of the Inborn Error Group and the ESID Genetic Working Party. We took advantage of the existence of a previous form created by Bert Gerritsen, who coordinated the OP studies; we introduced some new data due to recent genetic discoveries.

We intend to merge the results of a retrospective analysis started some years ago under the direction of Bert Gerritsen with new OP cases. In order to maintain the same database used in the previous study, we asked Paul Landais to modify the data using the SCETIDE database. We need your input and suggestions if you think that the form is unclear or incomplete.

If you are interested in participating in this study, I kindly ask that you indicate your willingness to Dr. Colin Steward: colin.steward@bristol.ac.uk or to Anna Villa: anna.villa@itb.cnr.it.

Furthermore, I would like to call your attention to a workshop on Ataxia Teleangiectasia which will be held next October in Italy on Lake Maggiore. If you are interested the website is the following: www.atworkshop.com. Some short information: The 2005 International Workshop on

Ataxia Telangiectasia, ATM and the DNA damage response, Hotel Villa Carlotta, Belgirate, Lago Maggiore, 8-11 June 2005. Conference Chairs: Luciana Chessa, Domenico Delia. Scientific Committee: Jiri Bartek, Pat Concannon, Dick Gatti, Jean Gautier, Janet Hall, Martin Lavin, Peter McKinnon. Topics: ATM, related proteins and DNA damage response. Alterations in the ATM and ATR pathways and their consequences. Cellular responses to DNA single strand breaks and related phenotypes. DNA damage responses in the nervous Therapeutic strategies. Invited system. speakers (accepted): Robert Abraham, Fred Alt, Nadine Andrieu, Jiri Bartek, Ari Barzilai, Jonine Bernstein, Vilhelm Bohr, Lise Borrensen-Dale, Keith Caldecott, David Chen, Junjie Chen, Luciana Chessa, Patrick Concannon, Thomas Crawford, Domenico Delia, Thilo Dork, Douglas Easton, Marco Foiani, Richard Gatti, Jean Gautier, Thanos Halazonetis, Janet Hall, Stephen Jackson, Penny Jeggo, KumKum Khanna, Kenshi Komatsu, Martin Lavin, Howard Lederman, Susan Lees-Miller, Jiri Lukas, Richard Maser, Peter McKinnon, Shuki Mizutani, André Nussenzweig, Tej Pandita, Tanya Paull, John Petrini, Rodney Rothstein, Yosef Shiloh, Tatjana Stankovic, Shunichi Takeda, Malcolm Taylor, Zhao-Qi Wang, Matthew Weitzman.

Finally, as you know, during the last ESID meeting in Versailles a new working Party, the ESID juniors was born, and it was decided to have at least one ESID junior in every Working Party. Eleonora Gambineri has joined the Genetics Working Party. I asked her to write a brief introduction to introduce herself to the ESID members: "My name is Eleonora Gambineri, and I am a senior pediatric resident and a researcher at the University of Florence, Italy. I would like to introduce myself as the junior member of the ESID Genetics Working Party under the supervision of Anna Villa. I have decided to join this Working Party because of my previous research experience in the area of primary immunodeficiency diseases, particularly IPEX. I have been working in Pediatric Immunology since I graduated from medical school in Italy, and continued to gain expertise in this field as a fellow under the supervision of Hans Ochs at the University of Washington, Seattle, USA. I hope my background and interest in the field can be a positive contribution to the organization, and I am looking forward to participate in this great learning experience."

#### Anna VILLA

#### Clinical Working Party

#### <u>Diagnostic guideline for Nijmegen Breakage</u> <u>Syndrome (NBS) patients</u>

Definitive - Male or female patient with either increased radiation induced chromosomal breakage in cultured cells or microcephaly, who has NBS-1, the gene defective located on chromosome 8q21 on both alleles.

Probable - Male or female patient with three out of the following four findings: microcephaly; typical facial appearance; lymphoma, leukaemia; serum IgG and IgA more than 2 SD below normal for age; increased radiation induced chromosomal breakage in cultured cells.

Possible - Male or female patient with at least one of the following four findings: microcephaly; typical facial appearance; lymphoma, leukaemia; serum IgG and IgA more than 2 SD below normal for age; increased radiation induced chromosomal breakage in cultured cells.

Spectrum of disease - Essential features found in NBS are microcephaly (99,7%), usually without retardation, typical facial appearance with a receding forehead, prominent midface with long nose and long philtrum, and a receding mandible. Important additional features are café au lait spots, vitiligo, clinodactyly and syndactyly. All NBS patients presented chromosomal instability,

X-ray hypersensitivity and increased risk for malignancy. More than 50% developed B or T origin lymphomas before 18 years of age. Many patients have recurrent bacterial and viral respiratory infections (56%) associated with antibody deficiencies.

Differential diagnosis - Ataxia Telangiectasia; Bloom syndrome.

## Revision of guideline for diagnosis of Ataxia Teleangiectasia

Definitive - Male or female patient with either increased radiation induced chromosomal breakage in cultured cells, or progressive cerebellar ataxia, who has disabling mutations on both alleles of ATM.

Probable - Male or female patient with progressive cerebellar ataxia and three out of the following four findings: ocular or facial teleangiectasia; serum IgA at least 2 SD below normal for age; alpha-fetoprotein at least 2 SD below normal for age; increased radiation induced chromosomal breakage in cultured cells.

Possible - Male or female patient with progressive cerebellar ataxia and at least one of the following four findings: ocular or facial telangiectasia; serum IgA at least 2 SD below normal for age; alpha-fetoprotein more than 2 SD above normal for age; increased chromosomal breakage after exposure to irradiation.

Spectrum of disease - AT is a progressive neurologic disorder. Most patients begin to have difficulty in walking at the end of the first year of life and are wheelchair bound by the teenage years. Ocular or facial telangiectasia are usually noted at 4-8 years of age. Many patients have recurrent respiratory infections because of low IgG levels. Leukemia or lymphoma are seen in 10-20% of patients and may be the presenting finding. Some patients are not recognized to have AT

until the second decade of life.

Differential diagnosis - Nijmegen breakage syndrome; Bloom syndrome.

#### Ewa BERNATOWSKA

#### Educational Working Party

At the Versailles meeting, the Educational WP together with the Congress held an Educational Day. This was the second educational day of ESID. The first one was held at the start of the last ESID meeting in Weimar. At that time, we expected a maximum 60 persons to attend. It turned out that many many more came and the Educational Day was a great success. So this time we were prepared and, indeed, the majority of the congress participants also took part in the Educational Day. The theme was innate immunity. Bruno Lamaitre gave an excellent and in depth basic background. He was followed by lectures on CGD by Steven Holland, on neutropenia by me, on defects of innate immunity giving susceptibility to infections with single agents such as streptococci and herpes virus by Jean-Laurent Casanova. Finally, we heard about complement deficiencies. I think, I dare say that also the Versailles Educational Day was a success and that we will arrange an Educational Day also at the next ESID meeting in Budapest!

In Versailles, the ESID Board also decided that the Educational WP will found a scholarship for a young person who wants to spend half a year in either basic or clinical research at an institution away from his or her own. The aim is to help young persons to pursue a career in primary immunodeficiency. For those that want to apply, see the advertisement in this issue of the ESID Newsletter!

Also, the Educational WP is right now preparing for this year's Summer School. It will be held rather late, in October, at Mallorca. Like previous years, the School will

take place over four days. The plasma industry is generously sponsoring the Summer School and thus, as in previous years, the students will only pay their own travel. We do hope also to be able to raise a couple of stipends to allow to help with travel costs for those who have difficulties with funding. Also, as last time, we will admit a few participants from outside Europe.

Anders Fasth and Mauno Vihinen are both representatives of their respective countries (Sweden and Finland) at the European Commission's Task Force on Rare Disorders. Primary immunodeficiencies are thus well represented within the European Union.

#### Anders FASTH

#### Registry Working Party

Dear colleagues,

The ESID online main registry is available under www.esid-registry.org/, for 180 primary immunodeficiencies with a common data model for all diseases. If you do not yet have a personal password, you may send a short email to us at <frisch@medizin.ukl.unifreiburg.de>. You will then immediately be provided with the "Agreement between the ESID and a Documenting Centre", and "Application form to obtain a user name and a password". You may also download these documents from the ESID website under the "ESID Registry" menu.

We would like to remind you that ESID will pay a compensation of EUR 10 for each patient's dataset (a dataset covers the "red fields" (core dataset) in the main registry) entered by June 30<sup>th</sup>, 2005. Please find a list of the 180 provided primary immuno deficiencies, and the 40 steering committees working on the data models for the disease-specific subregistries on the ESID website under "ESID Registry" ("List of the Steering Committees").

By February 15<sup>th</sup>, 2005, the number of registered documenting centers for the online registry has increased to 44 centres

from 24 European countries. 19 documenting centres have already obtained local ethic statements and data protection approvals, and have begun to document their patients. As of February 15<sup>th</sup>, 155 patients have been documented in the ESID online registry, covering 18 different primary immuno deficiencies. These are in detail: CVID, ataxia teleangiectasia, hereditary angioedema, XLA, RAG 1/2-deficiency, IL7R-deficiency, IPEX, CD40L-deficiency, NBS, DiGeorge Syndrome, ALPS, WAS, AID-deficiency, HIES, HLA class II deficiency, CGD, agammaglobulinemias and immuno deficiencies of unknown cause.

On February 11th, the start-up meeting for the EURO-POLICY-PID meeting took place in Stockholm, organized by Edvard Smith and Anna Berglöf. The ESID online registry is a central module of this network, and we are very grateful that the EU continues to support the ESID registry. Now, we will be able to employ additional people for i) programming additional subregistries, so that we can increase the development of subregistries from 4 to approx. 10 per year, ii) increase documentation, iii) optimizing the support for the documenting centers, and iv) work towards an EU-approved database concept. The latter is important, because as you know, the approval has currently to be done by each documenting center. Therefore, a general EU approval would be a great advantage. Anne-Marie Eades-Perner will take on this important effort.

The documentation of PID in which gene mutations are involved will be enhanced by linking the 90 disease-specific subregistries via the mutation detection module with the 90+ Immunodeficiency mutation databases (IDbases) by Mauno Vihinen (Tampere, Finland). Users will thus be able to enter the mutations through the MUTbase interface. These entries will then also be present in the ESID online patient registry

As you know, each documenting centre may decide to implement the ESID registry database system as a personalised version, and thus acquire the advantages of all the

other features of the database like the 'patient report generation' or the electronic import of laboratory data. To harmonise the implementation of such personalised systems, we are planning to realize a new concept, the so-called "Telematics model". Here, the documenting centres will NOT have to purchase, install and maintain a dedicated server in their own institution, instead the necessary server hardware may be maintained at one central institution. Since medical and personal patient data will be stored on different server systems and cannot be merged without authorization, this concept has already been accepted and welcomed by data protection officials.

In the course of the next weeks, we will start an e-mail and telephone survey to assess the present status of obtaining IRB/ ethic approvals, data protection approvals, and patient's informed consents by the various documenting centres. According to European data protection laws, these documents have to be provided by each documenting centre before entering patients' data into ESID online registry. We would like to gather valuable information on the specific situation at the different locations in order to be able to optimally support you with regard to ethics and data protection issues. In this respect, please also notice that translations of the patient's informed consent form may be downloaded from the ESID website in 13 languages.

In addition to the web-based registration, a newly edited paper-based registration form for centres which do not have a convenient online access is available for download on the ESID website (under "ESID Registry" / "New Core-Dataset-CRF"). The "old" entry forms will no longer be used.

Moreover, please find the presentations of the workshop on "Clinical and research databases in primary immunodeficiencies", held at the biennial ESID meeting in Versailles in October 2004, at the ESID website under "ESID Registry". Here, a very interesting review of thirteen important existing national and disease specific databases

in PID is provided.

Since October 2004, the CVID subregistry is running on the productive system. Please log on to the productive system on www.esid-registry.org/.

The DiGeorge syndrome, IPEX, hyper-IgE syndrome and ICF syndrome subregistries are available for testing in the ESID-TEST-registry. Please log onto the testregistry on www.esid-registry.org/TEST.jsp. Please use one of the following logins (test1, test2,.... test9) and START\_PASSWORD as the password. Please do not change this password (if you change it, other test-users will no longer be able to log onto the testdatabase). Nijmegen Breakage syndrome, secondary hypogamma globulinemia and osteopetrosis will follow in March 2005. In addition, we are about to start designing the SCID subregistries, with a general SCID dataset as drafted in Paris, London and Ulm and the gene-specific registries RAG and FOXN1.

Finally, I sadly have to announce that Barbara Frisch has been offered a permanent position at Novartis in Basle. This is a big loss for our ESID team here in Freiburg. We wish her all the best for her future and I would personally like to thank her for the tremendous work she did for ESID in the last 2 years. Thanks, Barbara! Her e-mail account, however, will remain active and mails will be forwarded to the new ESID-database managers Viviane Knerr and Benjamin Gathmann who will be part time on the project: A very warm welcome to them.

My best wishes to all, and please feel free to contact us any time you have questions regarding the ESID registry!

Bodo GRIMBACHER

#### Focus on a country:

Established member Q&A

Anders Fasth

Pediatric Immunology

Göteborg University

The Queen Silvia Children's Hospital

Göteborg, Sweden

Can you give me some information about your background and can you tell me something about your career history?

My name is Anders Fasth, and I am professor of pediatric immunology in Göteborg, Sweden. I have been working with PID now for more than 30 years. This means that I started with PID long before we knew the genetic background. Also, importantly, we did not have the tools to reveal the molecular diagnosis. Many immunodeficiencies that we at that time thought were one entity we today have divided into smaller and smaller groups.

I was brought up in the old university town of Uppsala, but did my medical studies in Göteborg. And Göteborg has become my home basis over all the years, even if I have done many excursions over the years. I graduated from medical school in 1971, and I already had married at that age, and had 3 children. After a couple of years working as intern and resident at smaller pediatric clinics in southern Sweden, I felt ready for research and asked Professor Anna-Lisa Laurell in Lund for advice. She was at that time one of the most important complement researchers. A tough and witty lady, who frankly declared that I was welcome, but I had to learn how to swim myself, "I will not help you". I stayed half a year. A fruitful time though, as I at the same time worked both at the bacteriology and, at that time rudimentary, clinical immunology lab.

But, I wanted to see patients so my next contact was quite naturally Professor Lars-Åke Hansson (IgA-deficiency, breast milk, clinical immunology in developing countries etc) in Göteborg. He arranged it so that I could finish my specialist training at the Children's Hospital in Göteborg, and I was back again in town. At one grand round, a couple of months later, he passed a note like school kids do to each other, where it was written: "How about to do your PhD thesis in the field of autoantibodies to Tamm-Horsfall protein?" I did not have the slightest idea what Tamm-Horsfall protein was, even less that we were supposed to have autoantibodes to the protein. But I said yes of course. For you still not knowing what Tamm-Horsfall protein is, it is a tubular kidney protein!

So, off I went. Our group was one of the first to use ELISA for antibody quantification. This was at a time, when no interest from the industry existed in the ELISA technique. No automatization existed. We did the ELISA's in ordinary plastic tubes and did the washing by hand, as well as the read-out in ordinary photometers. We experimented with different tubes to get plastic that had a constant and good absorption of the antigen to the walls. And I asked the persons in the lab to collect urine. Tamm-Horsfall protein was salt-precipitated from batches of 30 liters of urine! But we were indeed successful, and we found autoantibodies to Tamm-Horsfall protein in serum. We also found that they increased with age, and that the autoantibodies could be used to differentiate between cystitis and pyelonephritis. My thesis was finished in 1980, and a year later I went to the USA to do experimental work regarding kidney damage and Tamm-Horsfall protein. But during the whole work with the thesis and the post-doc year in Los Angeles, I felt this was just a step to collect experience and later be able to do clinical research related to patients with immunological problems.

Later, I learnt bone marrow transplantation in London together with Roland Levinsky and Gareth Morgan. London was a great place to learn the technique as at that time 11 hospitals performed BMT, so it was just to travel around between the



hospitals and listen to the many times strong opinions about how BMT should be done ...

Another chapter in my career history is my relation with Costa Rica. It all started in 1985 after Dr Oscar Porras returned to his country after doing a PhD thesis in Göteborg. His first encounter with PID in Costa Rica was a mother that had lost two boys with XSCID and now presented with the third boy. We did the first haploidentical transplantation in Latin-America November 1985, and we used the Campath antibodies to T-cell deplete the marrow. We succeeded, and this boy has grown into a healthy young man studying at the university in Costa Rica. The cooperation has continued over the years, and more Costa Rican doctors have done research in Göteborg and many Swedish medical students have as part of their studies spent time in Costa Rica.

## How did you become interested in immunodeficiencies?

I knew already in high school that I wanted to be a doctor and a pediatrician. During my studies in pediatrics, I met with a boy with Wiskott-Aldrich syndrome, and learned that his brother had died with the same diagnosis in a malignancy. I read about immunodeficiencies and got interested. And later, when I came back to Göteborg to finish my pediatric training I got the opportunity to care for another boy with Wiskott-Aldrich syndrome. He was only two years old at that time, and he has been a learning tool over the years. Finally, I transplanted him at the age of 14! Today, he is a young man of 33 with his own family.

I also owe a special thanks to Professor Richard Hong, who knew about my interest through Professor Hansson. He called me one day during my residency in Göteborg, and said please come over to Wisconsin within three days time because I will admit five infants with SCID this weekend. Not an easy task for a young resident, but I went and spent 10 days in

professor Hong's house as if I had been a member of the family since long. After that experience, there was nothing that could stop me working with primary immuno deficiencies.

What have been your achievements in research and patient care in the field of immunodeficiencies?

Maybe I have not achieved so much in research in the field of immunodeficiency from an experimental point of view. Sweden is a small country with 9 million inhabitants, and PID has a low incidence especially during childhood. However, the cooperation within ESID has been a gold mine. Samples can be sent to the specific group working with a special problem and clinical cases can be discussed.

I feel I am very attached to my patients and the patient care I enjoy at most. I have established stem cell transplant units both in Göteborg and Costa Rica. Patient care is also to teach other persons - doctors, nurses, and not in the least patients and their families - about immunodeficiency and in this field I think I have succeeded reasonably well.

What kind of developments in immunodeficiency do you expect in the near future?

I do expect that we solve what is behind common variable immunodeficiency and selective IgA-deficiency. Also, I do hope we learn to master the technique of gene therapy that still is riddled with so many unexpected obstacles.

What is your advice for young people who want to launch their career in immunodeficiency?

Learn from the patients. Use them by listening carefully to their history. Take care

of the details. And also, turn to the old case reports published. The early publications are very detailed. And attend the ESID Summer School in Primary Immunodeficiency!

And - last but not least - what does ESID mean to you?

A lot! I was around a table in Tübingen, Germany, together with 8 other persons when the very first discussions of starting EGID/ESID came up. Later, two meetings in Rome followed and then the meeting in Fillerval outside Paris in the early 1980s was the first true meeting of EGID/ESID.

I have been on the Board, I have arranged one of the biennial meetings, and now I am also the chairman of the Educational Working Party. I immensely enjoy the Summer School, with its chances to meet with all those young dedicated brilliant colleagues!



Young Investigator Q&A
Sólveig Óskarsdóttir
Pediatric Immunology
Göteborg University
The Queen Silvia Children's Hospital
Göteborg, Sweden

Can you give me some information about yourself and your background?

I'm Icelandic and I was born and grew up in Reykjavík, the capital of Iceland. I was only a teenager when I realized that I wanted to become a paediatrician. I went to

medical school in Reykjavík. As Iceland is a small country, almost all doctors get their specialist training abroad. I chose Sweden and the family moved to Göteborg. My plans were to move back to Iceland after some years, but the years have now been so many that two of my children have attended university in Sweden, one of them in medical school.

Can you tell me something about your career history?

For most of my career I have been at the Queen Silvia Children's Hospital in Göteborg. I am right now consultant in paediatric immunology.

How did you become interested in immunodeficiencies?

It is interesting to think about why we are doing the things we are doing. Some months ago I had a discussion about this with one of the old wise doctors at the hospital and he said: "I don't think we choose, but that we are chosen". Maybe it is so. I had not planned to work with immunodeficiencies, but when I was working at the paediatric oncology department, Anders Fasth asked me if I would like to work together with him in the field of paediatric clinical immunology and reumatology. My answer was yes, I just knew I was interested and I have never regretted my decision. This is an interesting field with a lot of challenges.

What have been your achievements in patient care and/or immunodeficiency research up to now?

Patient care and research have gone hand in hand as part of my interest in the 22q11 deletion syndrome or DiGeorge syndrome as it is still called. In 1993, I met my first patient with DiGeorge syndrome and I'm still following him. In 1997, I set up a multidisciplinary team to help the patients and their families as well as to study the

many fascinating facets of the syndrome. The multidisciplinary team has been a success, and close to 130 children, adolescents and adults have been investigated. I hope to present my PhD thesis later this year.

What do you hope to achieve in the future, and how ar you planning to reach this goal?

After my thesis, I would like to continue my research around the 22q11 deletion syndrome. There are so many questions still to be solved and learn more about. I hope to be able to lead the team and see others finish their PhD thesis using the unique clinical material we have collected. I am already the team leader and I feel I am quite good at inspiring others, so I am optimistic.

And - last but not least - what does ESID mean to you?

ESID is an excellent source to increase my knowledge about primary immunodeficiency syndromes. The biennial meetings are wonderful opportunities to learn and to meet others in the field.

What would you want to change if you were president of ESID?

Maybe, I would want to see a better balance between clinical and basic research at the biennial meetings. The basic research is of course very important to explain etiology and pathogenesis, but we must not forget the patients and their care. We can learn so much from studying the patients too!



## pID-care in development:

Can you give me some information about your background and can you tell me something about your career history?

My name is Nima Rezaei. I have been involved in research related to the primary immunodeficiency disorders (PID) since 1998. I was born on June 9, 1976 in Ghaemshahr, northern Iran, and passed the primary school in Sari, Iran. My mother is an English teacher and my father is an accountant. I have one brother and one sister; both of them are younger than me. After my secondary education in Alborz high school, I have entered the faculty of medicine, Tehran University of Medical Sciences in 1995. I have married with my best classmate in medical school in 2000. I finished my medical school in 2002. I have been working as a researcher in Immunology, Asthma and Allergy Research Institute, in Tehran, since then.

I was very interested in research from the first year of medical school. I used to be the director of research and conference division, the instructor of research and methodology workshops, and the director of research consultant ward in Student Scientific Research Center, affiliated to Tehran University of Medical Sciences during 1995-1998. After beginning the clinical rotations in 1998, I incidentally visited some patients with PID suffering from complications due to recurrent and severe infections and delayed diagnosis. In addition, I have found many patients with recurrent infections without any definite diagnosis. My private pilot study showed a poor awareness of this condition among general practitioners and pediatricians in our country, as they are rare disorders.

In order to organize the patients with PID in Iran, the Iranian Primary Immunode-ficiency Registry (IPIDR) was established in 1999 by collaboration of my colleagues and under the supervision of my tutors. Our goals were: 1. To enhance the knowledge about these diseases among

general practitioners and pediatricians; 2. To emphasize the importance of early diagnosis and treatment; 3. To determine the frequency of these diseases in Iran; 4. To stress the importance of teaching clinical immunology in the medical curriculum; and finally 5. to promote the research on PID in Iran.

hundred and sixty patients Six suspicious to PID have been referred to our center till now. However, the diagnosis of PID was confirmed for 474 of them. Among patients, deficiencies predominantly affecting antibody were the most common, constituting 43% of our patients (n=199), followed by defects of phagocyte function 27% (n=130), combined B- and T-cell deficiencies. and other well-defined immunodeficiency syndromes in 6% (n=27) (n=111),and complement 23% deficiencies in 1% (n=7).

Educational and research activities have been significantly increased after the establishment of the IPIDR. More than 20 longitudinal studies of a single patient, cohort of patients, and cross-sectional studies have been designed and accomplished based on the data from the IPIDR in the recent 5 years. In addition, 25 articles from the IPIDR have been published in scientific journals and more than 50 articles have been presented on international congresses during a 5-year period. While less than 5 projects and articles had been done before 2000.

This registry, being the first of its kind in Iran, is a collaboration of the major universities from all over the country. In fact, construction of such a registry is much more important than merely for its epidemiological aspect; it can show the health impact of PID and also increase the physician's awareness about such disorders.

Can you give me some information about health care in your country?

Iran is a lower-middle income country. With its estimated total population of 65.5m

it is rapidly urbanising. The country, covering 1,648,000 sq km, is divided administratively into 28 provinces, which in turn have 278 districts. Each district has urban cities/ towns and rural villages, i.e. in total there are 676 cities or towns and 66,000 villages. Iran has fairly good health indicators; however, given that the country despite spending 7.5% of GNP on health lags behind in certain respects compared to the regional countries. That is, despite being a well elaborated system, it has not kept pace with changing demographic and epidemiological characteristics of the population and the technological developments. To fulfil the constitutional obligation of providing health care to all its citizens, the Ministry of Health & Medical Education (MoH&ME) finances and delivers the primary health care (PHC), while secondary and tertiary care is financed through compulsory Social Security Organisation (SSO) for formal sector employees and self-employed and their dependents, and Medical Service Insurance Organisation (MSIO) for government employees, rural households, self-employed, and others, e.g. students. In addition, private insurance supplements these public insurance programmes. The MoH&ME is responsible for regulating both the private and public sector health care delivery.

Can you give me some information about PIDcare in your country?

The diagnosis of PID in Iran turns back to 25 years ago. The diagnosis of PID was made for less than 50 patients during 1980-1990, and they were treated with antibiotics and intramuscular immunoglobulin for the cases of hypogammaglobulinemia. The diagnosis has been increasingly made at an earlier age in more recent years, and there has been a trend toward more diagnoses. This is most likely due to the more widespread assessment of serum immunoglobulin levels and the development of immunological laboratory tests in our center

during recent years as well as physicians' increasing awareness of primary immunodeficiency.

Although there are some facilities for the definite diagnosis and treatment of PID patients in our center, it is limited to Tehran, the capital of Iran. Thus, many suspicious patients have to be referred to our center for the diagnosis and treatment. The treatment of infection can be done all over the country; however, Iq-substitution is done limited centers. The intravascular immunoglobulin therapy (IVIG) is a routine method for treatment hypogammaglobulinemia nowadays; however, we hope that subcutaneous method and home therapy will be used in the near future. In addition, there are limited experiences in stem cell transplantation; we hope that this method will be successfully extended. We established the Iranian Primary Immunodeficiency Association (IPiA) in 1998 by the collaboration between physicians and patients. The goal of the IPiA is to help individuals overcome these difficulties and live a healthy and productive life by efforts in following areas: To educate the medical community, patients and the public about primary immunodeficiencies; Establish a central database of all Iranian patients with primary immunodeficiencies and their family: Funding research into safe and effective treatments and ultimately a cure for these conditions; Helping patients and hospitals to obtain gamma globulin for PID patients; and Creation of a directory to include all doctors/clinics/hospitals presently involved in diagnosing and treating PID patients in Iran.

How did you become interested in immunodeficiencies, and what has been your role in PID-care in your country until now?

Now, my research is focused on PID in Immunology, Asthma and Allergy Research Institute, affliated to Tehran University of Medical Sciences. As one of the founding

board and directors board of the IPiA and the IPIDR, I hope that our registry will be promoted. In addition to doing basic and clinical research, publishing articles in scientific journals, presenting articles in international congresses, we have designed the IPIDR (http://www.iaari.hbi.ir/ipidr) and (http://www.iranianpia.org) IPiA the websites. Moreover, I am the executive manager of Iranian Journal of Allergy, Asthma and Immunology (http:// www.iaari.hbi.ir/journal); and also executive manager of First International Congress on Immunodeficiency Disorders, Tehran - Iran, 28 February - 2 March 2005 (http://www.iaari.hbi.ir/icid).

I believe that improvement of the physician's knowledge about PID is a prerequisite for early diagnosis and hence, can be prevented mortalities efficiently. Increasing knowledge available facilities for PID is important, not only in earlier diagnosis, but also to treat the patients more appropriate and decline their possible complications. Unusual, persistent or severe infections must always initiate the search for an immunodeficiency syndrome, because a delay in diagnosis may result in chronic infection, irretrievable end-organ damage or even death of the patient. The spectrum of assays offered by laboratories will need to be increased as defects of this type become recognized.

What do you hope to achieve in the future?

We are going to: 1. Continue research in this field, especially on the molecular basis; 2. Complete the IPIDR database; 3. Complete the IPIDR and the PiA websites; 4. Educate doctors, nurses, patients and their families by using the media as well as publishing the educational books and keeping them informed of the latest developments in research and treatment; 5. Support the patients with educational materials and information, qualified health care. treatment, medicines and safe blood

products; and 6. Continue the international activities by helding the International Congress on Immunodeficiency Disorders, publishing articles in journals participating and presenting articles in international congresses, and communication with other national registries and societies. Moreover I personally wish to work more seriously on PID. I am so interested in basic and clinical immunology, and genetics. Hence, I have been thinking about working as a postgraduate student at a university, where I can find a position concerning my interest.

Finally, I believe that communication is the most important means in the promotion of science. So, I hope that we have an Asian International and/or Society Immunodeficiency Disorders with International Congresses Immunodeficiency Disorders all over the world (not limited to European, American or Asian Countries). Moreover I think that it is time that we have an International Journal of Immunodeficiency Disorders.

#### Nima REZAEI

#### How could ESID help to achieve this goal?

I think that ESID could help to achieve these goals by: 1. Facilitating the exchange of ideas and information among physicians, scientists and other investigators who work on PID; 2. Funding and promoting research on the etiologies and mechanisms of these disorders; 3. Encouraging clinicians and investigators in research institutions or private industry to share their knowledge of diagnostic and management procedures; 4. Promotina the application and dissemination of recent advances biomedical science for the prevention, diagnosis and treatment of immunodeficiency diseases; and 5. Promoting interaction with nurses and patient associations, to increase exchange of information among patients and their parents, nurses, doctors researchers.







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## ESID Educational Working Party

Announces a

## €10 000 scholarship

The scholarship will be awarded to a physician/scientist under specialist training interested in pursuing a research project in the field of primary immunodeficiency.

The scholarship should be used for laboratory or clinical research work for at least 6 months.

The application should include a personal letter with a statement of career goals and plans how to achieve those, a project plan, curriculum vitae, list of publications, a letter of invitation from the accepting institution, and a letter of support from the applicant's head of department or tutor.

Please, send your application **not later than April 30, 2005** to the ESID Educational Working Party, c/o Professor Anders Fasth, Department of Pediatrics, The Queen Silvia Children's Hospital, SE-416 85 Göteborg, Sweden. E-mail: anders.fasth @ pediat.gu.se

Anders FASTH, Chairman

## ESID Educational Working Party



## ESID Summer School 2005 on Primary Immunodeficiencies October 19 - 23, 2005 Mallorca, Spain

Faculty: Anders Fasth, Andrew Cant, Esther de Vries Teresa Español, Georges Holländer, Gavin Spickett, Jacques van Dongen

The course is geared toward young doctors in training with a primary goal of education on the diagnosis, pathogenesis, and treatment of primary immunodeficiencies. For further information and application form mail to Anders Fasth, anders.fasth@pediat.gu.se Last day for application May 30, 2005

Please, copy and advertise in your country's immunology societies, and inform your young colleagues especially in the eastern European countries

Made Possible Through the Support of:







#### N.B. Deadline May 30, 2005

#### Application Form ESID Summer School 2005, Mallorca, Spain October 19-23, 2005

#### Please, print or type:

Last Name	Given Name	M.D	Ph.D	Other	
Citizenship	_Date of Birth		Sex M F	_	
Institution:					
Address					
Mailing Code	City		Country		-
Work Phone	F	FAX			
E-mail (readable!)					
Home Address					
Mailing Code	City		Country		_
Home Phone	F	FAX			
All communications will be	via e-mail.				
Please, enclose with the ap 1. Your curriculum vita 2. A letter of support of statement of caree the ESID Summer S 4. A case of primary in	ae and a list of publica from your head of dep r goals (typewritten a School in Primary Imm	partment or simabout 500 word uune Deficiency	nilar ds outlining your Disorders will be	career goals and wh	
Background:  ☐ Pediatrics ☐ Internal Medicine ☐ Clinical Immunology	☐ Rheumatology☐ Hematology☐ Other		ergy/Immunology	logy · (adult)	

Selected applicants will be notified by August 10, 2005. They will receive free accommodation, but travel is at the expense of the applicant. A few travel grants will be available. Relevant information will be sent with the acceptance letter.

E-mail the completed form and attachment to "ESID Summer School" anders.fasth@pediat.gu.se. If problems alternatively send application to: Professor Anders Fasth, Dept of Pediatrics, Göteborg University, The Queen Silvia Children's Hospital, SE-41685 Göteborg, Sweden not later than May 30, 2005.

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